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How to Beautify the School Grounds.

By CHARLES R. SKINNER,

State Superintendent of Public Instruction, New York.

The famous recipe "How to cook a hare?" began with the sage counsel, "First catch your hare." Many schools cannot beautify their grounds because there are none to beautify. School buildings often stand directly upon the street with only narrow alley-ways on either side, and barely room in the rear for the illy-constructed, mal-odorous, unhealthful closets, at once a menace and a disgrace to the communities tolerating them. An unwise and niggardly economy has prevailed in many cities and villages which has cut down to the lowest dollar expenditure for school buildings and grounds, and lavished large sums on the erection of court houses and jails.

In many prosperous cities and villages and rural communities other school buildings stand in the midst of a plot of ground without trees, shrubs, plants, flowers, or even green grass. Upon these buildings the storms beat in the winter and the sun in summer, with no protection whatever from cold or heat. These buildings are frequently without blinds or curtains to exclude the glare of sunshine, and are as bare and unattractive as it is possible to conceive buildings to be. Pupils reach them by muddy paths or by no paths at all, through grounds that have never received one hour's care since the buildings were erected.

In many communities the school grounds would require much work to properly level and drain them. On other school grounds unsightly stones and decayed trees are found which should at once be removed. When grounds are properly leveled and drained and freed from disagreeable obstructions, the first effort to beautify them in every instance, should be to erect the necessary closets required by law in the state of New York, and to shield them from observation by a thickly planted row, or clump of evergreens. Next, hard walks should be made from the street to the different doors of the building, and from them to the closets screened by the evergreens.

When the school building stands a short distance from the street these walks may wind around oval plats where flowers and shrubs may be grown, or where fountains may be erected, or statues of Washington, or Lincoln, or Grant may be placed. The last recommendation applies, of course, to large communities. In various parts of the grounds beautiful trees may be planted,

like the maple, the "state tree" of New York, or the elm, or the oak. Between these plots of ground, of whatever form, oval or otherwise, should be sown seeds of the most beautiful and hardy grasses adapted for lawns so that there shall be formed a smooth and handsome turf, which must be often rolled and carefully cut. In some shaded corner native ferns should be planted, and elsewhere some of the many elegant native shrubs should find a cherished home. The suggestion of State Supt. Sabin, of Iowa, is worth adoption: "To teach children the kind of trees which flourish best in that section; which of them are best for timber; which for shade; and which for fuel. Specimens of each will then be found on the school ground, and referred to for purposes of illustration. In the same connection we must teach how to plant and care for them, and cultivate in each an honest respect for a thriving, growing tree."

In the rear of the school buildings the playgrounds should be located, where trees also may be planted to afford shade and pleasure, but not to interfere with the sports of the children. If in the planting of the trees in the grounds the children are permitted to take part, and to call them after the names of favorite statesmen, like Washington or Lincoln, or of authors like Irving or Bryant, there will be a feeling of interest and ownership in the trees on the part of the children which will go far toward securing needed care for them.

The plots devoted to flowers and shrubs may have many varieties in the passing years. The children often have plants they would gladly place in the school grounds for the summer. Others have seeds which they would sow, so that each summer the grounds would disclose the taste of the pupils as well as of the teachers. Different plots might be assigned to different rooms or classes of pupils, and a wholesome rivalry excited as to which should be most neatly kept, and show greatest improvement in the summer.

Great variety might be given the grounds from year to year by training hardy vines and creepers over the walls of the buildings, and around the windows, or by planting them beside arches and trellises over which they would grow. The comparatively trifling expense needful to make the required arches and trellises would gladly be met by the parents when once the children proved their interest in such methods of beautifying the grounds.

It may not be amiss in this connection to speak also of beautifying school-rooms as well as school grounds. According to the law of the state of New York the national flag must be displayed over every school-house in the state during the hours of school day. It may prove a helpful suggestion to teachers to say that a large flag or a number of small ones will do much toward decorating a school-room. When pictures and mottoes may be had also the otherwise unattractive walls assume a very cheerful aspect and the pupils profit largely thereby. Many school-rooms would be greatly improved if the walls were painted in some soft neutral tint which would relieve the eyes of pupils and make the room more attractive. Potted plants and flowers will be a great addition to the flags and pictures and mottoes in decorating the school-room. Especially do these give pleasure in the winter months when the view out of doors is cold and bleak. Even four or five beautiful plants growing in the school-room give a cheering an-

wholesome suggestion of the spring and summer that are on their way with their sunny skies and bright flowers, which children love so well.

In the state of New York much has been done to secure attention to this subject through the observance of "Arbor day." Additional stimulus has been given in this direction by two cash prizes offered by Mr. William A. Wadsworth, of Geneseo, N. Y., for the first and second best kept district school grounds in the state, as follows—\$100 for the best and \$50 for the second best. These prizes given two years in succession aroused great competition, many districts contending for the honor. Illustrations of the prize-winning grounds given in the "Arbor day" annuals published under the authority of the state superintendent of public instruction show that district school grounds in rural communities can be made beautiful.

One element to be taken into account in discussing the question "How to beautify school grounds?" is the indifference of a great majority of parents and tax-payers respecting it. "What is the use?" they say. Because there is no lowering of the tax rate, because no immediate pecuniary advantage accrues to pupils or parents, many districts continue, as in years past, to neglect the school buildings and grounds, never caring whether they are pleasant or unpleasant; attractive or disagreeable. Often in the same districts may be found barns and outhouses far more neat and orderly in appearance than the school buildings and grounds, men caring more for a suitable place in which to keep their horses and cattle than for seemly and inviting premises where their children spend so large a proportion of their waking hours.

"How to beautify school grounds?" involves in substance the education of parents and tax-payers respecting the value of the beautiful in human life. This education must be carried on by the determined effort of those interested, by inviting the men in every district to give up "Arbor day" every year to making the school building and grounds as attractive as possible. If in the entire neighborhood only one building with its accompanying grounds can be made light, clean, pleasant, and beautiful, that building ought to be the public school.

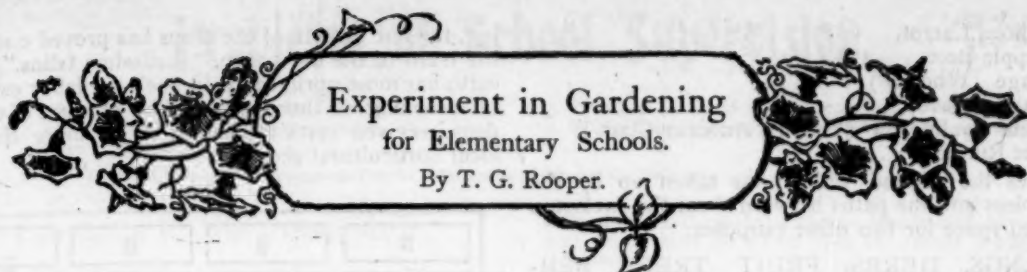
It must not be expected that all can be done in one year. It may be too much to hope that every man in the district will help in the first effort to beautify the school grounds, but if persisted in by those interested year after year, "Arbor day" will come to be distinctly "The Children's Festival." It will teach parents also the value of trees and shrubs, and flowers and lawns, and the entire district will soon become more attractive in appearance. What Governor Morton wrote for "Arbor day" in New York in 1896 is well worth repeating: "Beautifying school and home grounds with trees emphasizes obedience to that higher law which adorns character and life with whatever is pure, noble, and of good report."

It is an encouraging sign to note the increased attention now being given to this subject. Hitherto too little thought has been given to it. The influence of their surroundings is felt far more by children than by adults. Impressions made upon their tender susceptibilities are deeper and more enduring than impressions on men and women. The element of beauty appeals to the child-nature most powerfully. A picture, or flower, or plant, or tree awakens interest and calls forth expressions of delight. Why not minister to this from the very beginning of school days, and make this innate sense of beauty contribute to the child's education and happiness, and leave its powerful impress on character and life? The world has been fashioned by its Divine architect in forms of wondrous beauty. "The heavens declare the glory of God and the firmament sheweth His handy-work." Forms of varied shape and color appeal to the purest and loftiest feelings of the human heart by night and by day, in the heavens above, in the earth beneath, and in the waters under the earth. "There is no speech nor language where their voice is not heard. Their line is gone out through all the earth; and their words to the end of the world." It will be a glad day for the schools of the United States, a glad day for the armies of children in the years to come when school authorities shall secure, by legislative enactment sustained by the public sentiment of the people in all the states, adequate provision for the careful maintenance and proper beautifying of school building and grounds in our entire country.



Toponas School House, Routt County, Colorado.

THE SCHOOL JOURNAL for April 3 will contain an illustrated article on the "Development of School Architecture in a Young State," by Lucy E. R. Scott, of Denver. The above is one of an exceedingly interesting set of pictures reproduced from the annual report of the State Superintendent of Colorado, by courtesy of Mrs. A. J. Peavey.



STARTING A SCHOOL GARDEN.

There are two ways of setting boys to work at gardening. They may either cultivate a plot in common, or each boy may be provided with a plot of his own. The latter plan is the better and more "educative" way. If a boy is one of a group cultivating a garden he cannot know for certain what is the effect of his share in the work. Unless a boy is sole master of a plot of his own he cannot be sure what are the results of his efforts, whether meritorious or defective. A school garden must not be treated as though it were an allotment. The owner of the allotment seeks to make the greatest commercial profit out of his parcel of land.

In starting a school garden the teacher has partly to instruct the boys in the rudiments of the gardener's craft according to the best methods, and partly to tighten their grasp of the elements of modern science. The boys will learn as much through failure as success, and, indeed, where the conditions are so favorable that, be the gardening good or bad, the crop is always forthcoming, though the undertaking may prove a greater pecuniary success, it will have less value as an educational exercise than where nature is unkindly.

THE OBJECTS OF SCHOOL GARDENING.

Again the main object of a school garden is not putting boys as apprentices to the gardener's craft. Some boys, no doubt, who learn gardening will become gardeners in a professional way when they grow older, but as a school subject it would be wholly out of place unless it served a general purpose as well as this merely technical end. It is impossible in these days to take up any book, whether on the farm, or the garden, or other industry, without finding that the writer assumes as matter of general knowledge many things which the public still regard as the peculiar province of men of science, and the farmer who had the courage to scoff at farming by what he called "'gens" (oxygen, hydrogen etc.) only spoke out loud what is the secret opinion of many.

Gardening may be so taught that boys will learn through it the elements of modern science, especially as applied to practical work, and their book will be their garden plot, and not a text-book. Their note-books will contain remarks not to the effect that "It has been observed," or "It has been ascertained," or "It has been discovered by scientific men," but rather, "I have observed," "measured," "I weighed, and the results of my measurements and observations are as follows:" The lessons in elementary science which are given in the school-room may be illustrated by practical work in the garden beds, and then the science will escape being mere book learning, and the gardening will be far more than mere technical training.

The result of this combined indoor and outdoor instruction will be to enable the boys to know what is the true nature of an experiment, what are the methods of science, in what way inferences are drawn, what are the sources of error, and why it is as easy for a merely practical man to underrate as to overrate the results of science, and to make merry over "farming by 'gens." Even though on leaving school a boy may live in a town and have no opportunity of keeping up his gardening, his time spent over it at school will not have been wasted, because he will have acquired the living knowledge of certain scientific facts which is becoming more and more indispensable in daily life.

DIVISION OF THE PLOTS

Each boy, then, should have a plot to himself. In my arrangements I have provided plots for a dozen boys.

The plots must not be too large because the boys cannot work more than two afternoons a week. The shape, again, is important, because it is desirable that the boys should be able to perform much of their gardening while standing on the paths between the plots, instead of having to step on the border for every operation. The plots, therefore, measure thirty feet in length and are only ten feet in width. The four corners of each plot are carefully marked by substantial-squared pegs firmly driven into the ground. Each plot is numbered, and the numbers are written clearly and boldly on the face of the pegs.

The longer axis of each plot extends in the direction of east to west, and the width is in the direction of north to south. This arrangement facilitates the cropping.

The vegetables are planted in rows across the plots from north to south, as this gives them the best chance of thriving. Each vegetable is planted in the same line right across all the plots, so that although in the separate plots the rows are short, being only ten feet long, yet when the whole set of plots is looked at in one view the vegetables are seen to be planted in long rows extending right across the plots in regular lines from south to north. I will now describe the cropping of one of the plots. All the others are cropped in the same way.

The cropping of a plot:

Broad Beans,
Hollow Crown Parsnips,
White Spanish Onion,
Bedfordshire Champion Onion,
Radishes,
Lettuce (two rows, Cos and Cabbage)
Potatoes (three rows, early, medium, and late)
Brussels Sprouts (three rows to follow in succession.)
Cauliflower,
James' intermediate Carrot,

Shorthorn Carrot,
Pineapple Beet,
Cabbage (Wheeler)
Drumhead Savoy,
Autumn Cauliflower (Veitch's Autumn Giant)
Scarlet Runners,

Besides the ground which was taken up by the twelve plots and the paths between them the enclosure contained space for two other purposes:

SEEDLINGS, HERBS, FRUIT TREES, BERRIES, ETC.

(1) Along the south side there was a border about one hundred feet in length and ten feet in width for growing certain vegetables which did not lend themselves readily to separate treatment in the twelve plots, such as vegetable, marrow, asparagus, and sea kale. Here, too, were grown various spot herbs, such as thyme, for raising seedlings of such vegetables as were to be afterwards pricked out in the other plots, such as celery, lettuce, leeks, sprouts, and cabbage.

(2) At the east end of the ground there was space for plots of the same size as the others, viz., thirty feet by ten feet, in which fruit trees are planted, including standard apples, pears, and plums, and also such bush fruit as currants and gooseberries, and besides these are the raspberries and tomatoes. The fruit trees were planted with the object of teaching grafting and pruning. Room is also found for a strawberry bed, and a few herbaceous flowers are set along the edge of the borders, as an in-maple, birch, and ash.

The gardens were enclosed by a barbed wire fencing inside, which a privet hedge has been planted, and at intervals a few trees are set in the hedge such as poplars, maple, birch, and ash.

Near the gate of the enclosure is wooden "shanty" for the accommodation of tools, etc. It is made of tarred boards with a corrugated iron roof. It is nine feet square and the height at the back is nine feet, while in front (where the door is) it is six feet high. The floor is paved with brick and suitable shelves are provided. Each plot has a set of tools assigned to it, and the tools are numbered to correspond with the plot to which they belong. Each set of tools hangs from a peg, which has a corresponding number against it. The boys are taught to keep their tools scrupulously clean by aid of linseed oil and paraffin, and put them away in an orderly manner after using them. The following is a list of the tools which are provided for each plot separately:

List of tools for each plot:

- 1 Dutch hoe (four inch)
- 1 Draw hoe (four inch)
- 1 Fork (four prong)
- 1 Spade (seven inches wide and eleven inches long)
- 1 Rake (ten comb)

There are also tools to be used by all the boys in common for general purposes. The following is a list of them:

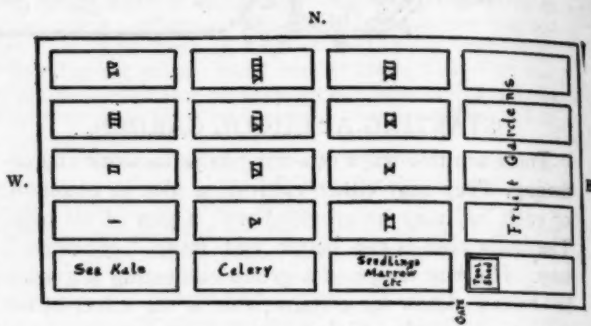
List of tools to be used in common:

- 1 Besom,
- 1 Mallet,
- 2 Wheelbarrows,
- 1 Water can,
- 2 Boat baskets,
- 4 Lines, sixty feet in length.

EFFECTS OF GOOD AND POOR GARDENING COMPARED.

The soil was of the worst possible description, consisting of almost pure gravel. Cultivation was commenced by trenching to a depth of two feet deep, which involves digging out three spits. Stable manure was applied somewhat liberally at the bottom of the trench. The summer of 1896 was very dry, but owing to this deep trenching, although there was no artificial water-

ing, the fine growth of the crops has proved once more the truth of the old adage, "justissima tellus," for the earth has most uprightly paid back the labor expended in trenching so thoroughly. The produce of the gardens received certificates of merit at more than one local horticultural show.



General School Plan of Gardens. Each plot 30 ft. x 10 ft.

Adjoining the school garden are some plots where vegetables have been planted without deep trenching, and, hence, the roots being unable to penetrate deeply into the soil, and being unable, owing to the dry summer, to obtain moisture near the surface, have not developed properly, and a niggardly crop is the result. This contrast between good and bad gardening forms a most telling object lesson, and acting on the advice of Mr. Pickering, who is conducting an experimental fruit farm near Woburn, the instructor proposes to extend the principle and establish a certain number of plots which will illustrate the effects of bad gardening. Observation, combined with exact measurement, will show not only that the right method is right, but the extent of the difference in results, and the amount of loss involved in pursuing wrong methods.

THE YOUNG GARDENER'S DIARY AND ACCOUNTS.

The boys are taught to make rough notes on the ground, recording the operations of each day, the dates of planting the seeds, and the names of the sorts selected. Hints are added as to the distance between the plants, the manure used, and other matters. The notes are worked up in school in a systematic way. This is one important link between the work of the instructor out of doors and the work of the class teacher in school.

Each boy sold the produce of his own garden, and the money so earned was brought to the instructor, who entered it in an account book, reserving a separate page for each boy. At the end of the year the money is divided, one-half being kept to purchase seeds for the next season, and the other half given to the boys in proportion to their earnings. As a check on the accounts each boy keeps a book of his own, so that he may see that he receives his proper share. In this way some boys earned eight shillings, while the average was about six.

The success of the experiment is due to the interest which has been taken in it by the headmaster of the Boscombe British school, and by Mr. Watts, of the Bournemouth palace nurseries.

The plan given above shows the general arrangement of the garden plots.



Problems of School Supervision.

1. Province of the Supervisor. By L. H. Jones.
2. Supervision as Viewed by the Supervised. By Sarah C. Brooks.

3. Principal Duties of Superintendents. By C. F. Carroll.
4. Skilled School Supervision: The Massachusetts System.

(Nos. 1 to 3 are parts of papers read at the Indianapolis meeting of the Department of Superintendence, N. E. A.)

Province of the Supervisor.

By L. H. Jones, Superintendent of Schools, Cleveland, Ohio.

It is proper to say, in the beginning, that I do not mean that any one supervisor will, at any one time, do all the things I mention, but that these things are within his province, and necessary, as things go, to the best schools.

1. The supervisor should set the standard of work, i. e., should teach his teachers what is justly called successful work—a degree of success which will satisfy reasonable expectations, above which the teacher may go as he wishes to excel, and below which he may fall only at his peril.

This work has four prominent methods, all of which are required for the full accomplishment of the work.

THE WRITTEN EXAMINATION.

The most important one is that of testing pupils through written examinations presented by the supervisor, without notice to either teachers or pupils. The questions for these tests should be prepared with the utmost care, and made to cover the portion of the work upon which a judgment is desired. It is necessary to have a care as to the kind of question that is to be put forward when it is desired to set up a standard of teaching. The questions should require an application of knowledge rather than its reproduction by memory, since their character in this respect will determine, to a great extent, the trend of future effort by the teacher.

The answer papers written by pupils in response to these questions should be carefully studied by the teacher, but not perverted. The desire of the teacher to place the results of her teaching in figures should not be encouraged. Percentaging papers always tends to exalt non-essentials beyond their deserts, and to obscure the less obvious, but more important elements of real progress in study and recitation.

When the teacher has familiarized herself with the contents of the papers, the supervisor should do the same. Then the two should confer in a spirit of friendliness, but with the hope of coming to a conclusion, with reference to the results, which shall be of future value. To secure the full benefit from such a conference there must be absolute frankness and earnestness by both parties. All successes must be fairly noted, all failures frankly admitted, and all mitigating circumstances fully considered. Then judgment must be rendered, and the teacher must understand that the standard applied is an expression of the superintendent's best judgment and intended as a guide for future effort. Such a test should come neither at the beginning nor the close of a term, or a year; but so soon after the beginning as a sufficient amount of work has been done to afford an adequate field for testing. The teacher then has an opportunity to profit by such standard for the correction of errors, the supplying of deficiencies, and the general improvement of the work. Afterward such tests as are needed in connection with promotion of pupils can be given, but these should not be confused with those referred to above.

THE ORAL TEST.

2. The second movement in the matter of setting up standards is the oral test. This should be given after the written one, and should cover the same ground. The questions should be less formal than the written ones, and the superintendent, in conducting the test, should be on terms of good comradeship with the pupils. Pupils should be encouraged to enlarge upon the questions given, and express as fully as possible the more liberal phases of the teacher's work, which cannot be so easily reached by the more rigid requirements of written test. Many excellences of good teaching will manifest themselves in this way; and by contrast, failures stand out in emphatic prominence. The teacher should study the work while in operation, and confer with the superintendent about it afterward.

OBSERVATION WORK.

3. The third is the observation by the superintendent of the actual teaching which the teacher does. For this purpose he should make his personality as completely non-effective as possible, allowing the conditions in the school to be as nearly as may be what they would be without his presence. A conference should follow, in which a judgment is pronounced upon the work. The teacher here should be thrown upon the defensive, in that she should be held for a reason for each step of the process; and he should be held to show how the principles of education are fully vindicated by tangible results. Purposelessness in teaching should meet with no encouragement; but

native grace and capability should, like beauty, be accepted as their own reason for being when the results are present and incontestable.

ACTUAL TEACHING.

4. The last exercise in this list is that of teaching by the superintendent. This should be done in the presence of the teacher, and under as nearly as may be the limitations which the teacher is required to observe. A superintendent should never lose the touch with child mind, which comes only by teaching children themselves. His counsel will be more eagerly sought, and more zealously followed by his teachers if he can teach better than they in their own school-rooms. Indeed, whether he can do so or not, a general confidence in his honesty of purpose will be developed by his willingness to subject himself to criticism on an equal footing, viz., simple merit.

TEACHERS' IDEALS.

II. The superintendent or supervisor should create for his teachers ideals of possible attainment in the different provinces of educational work.

This is a work distinctively different in kind from the setting up of standards of work to be immediately realized under existing conditions. Standards are authoritative. They should be accompanied by the demand for their immediate and unconditional realization. Ideals should draw by their own attraction. The disturbance which they create is that divine discontent which always has in it an element of hopefulness. To have this element of hopefulness in them, ideals must be founded on the actual. In order to be full of inspiration, they must transcend what now is.

Two steps of the procedure are here made plain. It is necessary to make the actual seem rational, and the best seem possible. In many instances, ideals are so constructed as to make the corresponding actual seem so meager by contrast as to excite little hope and no enthusiasm. A wise superintendent will take care to find instances of work in which the methods and results can be shown to have the direct relation of cause and effect. The special elements in the methods which are causes of the best in the results may be detached from their incumbering incidents and made to stand out glorified in the whiteness of reason.

It is a great service to teachers to show them wherein what they have been accustomed to do is the result after all of rational effort, though they may have been unconscious of its full import at the moment of its doing. Teachers are more able and willing to begin to study for improvement after they have been assured that change does not necessarily mean revolution.

But it is in the sphere of ideals that the influence of the supervisor, if he be capable, is of supremest worth. Ideals of education must be developed in the minds of teachers so as to inspire to highest and noblest effort. These ideals must express the hope of the future and cast such radiance over the plain path of common teaching as shall make it seem the very way of salvation to pupils and teachers alike. Teaching is a thing that cannot be well done for money. The good teacher earns a higher salary than he usually receives, and he should be better paid. He can teach better by reason of being better paid, but he must have a higher motive than mere money before he can really earn the highest salary of which he is capable. To be of highest worth he must have the noblest conception of the nature and worth of the work he is trying to do. This conception or ideal, when it is sufficiently noble, will of itself develop the enthusiasm and consecration necessary to the most efficient teaching.

HIGH IDEALS REINFORCE SPIRITUAL POWERS.

I scarcely ever fear that a conception of education will be gained that is too high, too strenuous, or so high that it cannot be to some considerable extent realized. I have occasionally seen a teacher with an elevated notion of his work unable to realize his ideal from failure to understand the rationale of its accomplishment. At one time in my own experience I held an ideal of teaching so far above my power to actualize that I grew despondent. But I chanced to see a young lady teaching a school in a little frame school-house in North Third street, Richmond. Ever after I knew that my ideal was too low, and I must yet study the means by which the tension between the ideal and the real could cease by their perfect blending. No doubt the highest ideals are never realized; but the greatness of work is, nevertheless, produced by the presence of the ideal which lies unrealized within it.

It is told of Leonardo da Vinci that while painting "The

Last Supper," in the chapel at Milan, he had little difficulty in painting his ideal of each face till he came to that of Christ. Here he pondered long, and, when challenged for the reason of his delay, said that though he had a perfect ideal of the ineffable grace and beauty which should play upon the divine-human face, he had not yet discovered the particular massing of the paints, and the disposal of light and shade which would produce this effect. He found it easy to find suggestions for the other faces—even for that of Judas. In like manner we have always about us examples of poor work, but we wait long for suggestions for the highest and best. Art critics say that the picture was never completed; and that there are some unfinished strokes on the face of the Master. But the greatness of the picture is due to the very imagination which here almost passed beyond the sphere of actualization.

I am never afraid that the greatness of work in teaching will suffer from too high an ideal, provided that the conception is honest. Indeed, precisely here is the highest province and the greatest privilege of the supervisor. One can easily set a standard of what must be done; but one can set no limits to what may be accomplished. The ideal of education is never a fixed quantity. The terms "good" and "poor" as applied to school work are relative. One degree is good till a better is thought, when, without any essential change in itself, it quietly glides into the other class. The teaching act is never itself a fixed fact; it ebbs and flows as life itself recedes or abounds. Being a spiritual process, only spiritual forces serve. High ideals so reinforce spiritual powers that they give virility and impressiveness to the teaching act as nothing else can do.

A true teacher who does not aspire is inconceivable. The instinct for right mental processes, that teaches to know what questions to ask, what suggestions to make, what illustrations to use—which suits the action to the word, and the word to the theme—which directs every movement through the multitudinous sub-processes of the successive steps of a long lesson, is rarely directed by a clearly conscious rationale of every movement. It is rather the half-conscious movement of a mind possessed by its ideas and impelled by a great love and a great hope.

THE GUIDING LIGHT.

The light in which the spirit finds its way in guidance of the youthful mind through the maze never shines from the rear; but is rather a reflection cast back from an ever-forward moving ideal which attracts while it lights the way. The whole philosophy of education should be involved in the act, because it should be wrought into the ideal by careful and prepared study; but the immediate guidance is something higher than the reason, suffusing the glow of the rainbow over all, but holding everything as sternly in order as if it were held in the grasp of destiny. Indeed, it is destiny—divinely and clearly understood—that guides the best teaching.

He who can inspire his teachers to place themselves under this influence of the highest and best, and hold themselves there of choice, has solved the problem of securing good teaching. There is no need to grow discouraged if ideals are not always reached in daily practice; they tend to realize themselves, and each day's earnest effort but brings the good time nearer.

Browning says:

"The high that proved too high, the heroic for earth too hard,
The passion that left the ground to lose itself in the sky,
Are music sent up to God, by the lover and the bard;
Enough that he heard it once; we shall hear it by and by."

STUDIES OF TEACHERS.

The range of topics that should be studied by a superintendent with his teachers is as wide as the subject of education itself; and they are as numerous as its sub-divisions. Not alone the professional subjects of psychology, child study, and methodology should be studied, but the studies must be pushed into kindred matters of art, literature, and science. Above all the relation of school education to that given by business and the various institutions which co-operate with or succeed school life, should be studied. School must be seen to be a legitimate part, but not the whole of child-life—especially it must be seen to be life itself. The child should not be led to consider himself so much as preparing to live, as it should be led to live, and, through living, to prepare to live better. A part of the weariness and drudgery of teaching is removed when the teacher finds that legitimate living with her pupils is a considerable part of his daily task.

If the superintendent can come to be the acknowledged leader in such broad consideration of the subject of education, he will have done much to enlarge the horizon of his teachers and to assist them to form liberal and hopeful ideals of their work. Such work must be carried on side by side with practical studies in order to realize these ideals in school work. There are at least two forms of this study that are indispensable to a right supervision of schools:

(1) Joint study by superintendent and teachers of the pupils' mental processes and results while they are being taught by the teacher.

(2) Practical teaching by the superintendent in the presence of the teacher, under the limitations of time under which the teacher is accustomed to teach. These call for but brief treatment.

THE CHILD STUDIES OF THE TEACHER.

I have no disposition to under-value the kind of child-study carried on by specialists. These studies are an essential part of the progress of the profession, and the generalizations when finally formulated and established, will constitute a valuable body of pedagogical doctrine. But the larger share of it is of such far-away character, of such technical nature, as to be unprofitable for the average teacher to carry on as part of her school work. All experiments which must have a special preparation in order to produce the conditions necessary for their study, take on a more or less artificial character. At least, I am convinced that no other child-study is half so valuable to a teacher as that sympathetic study which an intelligent teacher can make of the members of his own school, as he is engaged in the regular teaching processes of the day, under the ordinary conditions and forms of the recitation.

It is especially proper for the superintendent or supervisor to assist in this work. The teacher frequently does not know how to begin, or how to make the process most profitable. To obtain the best results there must be unity of purpose between supervisor and teacher, viz., study for improvement, with as much as possible of the personal equation eliminated.

APPLICATION OF PRINCIPLES.

The superintendent should remain a quiet, though intensely attentive, spectator of the recitation. He should then spend a little time in remembering the different occurrence which constituted the process of the recitation, preparatory to a consultation at the close of the school day. At this conference the philosophy of these occurrences should be carefully expounded and applied. The significant occurrences only of the recitation should be dwelt upon—the illustration of characteristic mental actions noted in the work of both teacher and pupils should be noticed and explained. The psychological and pedagogical principles underlying every significant movement of mind in either pupils or teacher should receive attention.

While the superintendent should hold himself responsible for explaining and applying principles to these instances of mental action involved in the correct and incorrect answers of pupils and the correct and incorrect processes of the teaching act, the teacher should be led to justify every form employed by him in instruction and management.

THE SUPERVISOR AS CRITIC.

The whole should be a friendly contest, wholly separated from those conferences in which a superintendent must sometimes find fault with an incompetent or neglectful teacher. To make a very brief illustration, I will recount a single incident which occurred in my own experience a few days ago. I entered a third-grade room as the recitation in number was in progress. The teacher was one of two years' experience—strongly grounded in her faith in forms, brought about by her rather recent normal school training. She was teaching a number lesson. She began with a series of mental problems, based on the tables, "4 times 6 equals what?" The pupil addressed said "24." The teacher said "and 7?" The pupil, using 24 as one term and "and 7" as the other factor, merely said "31." The teacher said "one-half of it?" The pupil, "15½." The teacher "and 6½?" Pupil, "22." Teacher—"Divide by 11," etc., etc. Three long series, identical as to general method, were given in succession. Pupils had grown listless, paying attention to answers only. Every problem given required the answer to be used as the basis of the next process. The fourth series began with "4 times 3?" A pupil answered, "12." Every child mentally seized 12 and held it as the basis of the next problem. Without any evident intention on her part, the teacher gave as the next problem, "3 times 4?" without the slightest indication of contrast through intonation. The boy was dumbfounded; not because he did not know the product of 3 times 4, but because he could not exactly see how to perform the process of 3 times 4 upon 12, which had been the previous answer, and which, by the form of the exercises, which had preceded it, he had been led to expect must be used. He stood without answering. The teacher told him it was easy, asked him to hurry, and did many other things which a nervous teacher will do under such circumstances, and finally, in order to help him still more, said to him: "Just turn them around;" referring to the reversed order of the factors, as compared with those of the previous problem. But the only thing the boy had in mind was 12; so he turned the figures around and blandly answered "21." The explanation of how that boy came to answer "21" was one of the most valuable lessons in psychology, and methodology, that this teacher ever had.

In this way it is possible to study with teachers the real meaning, together with the common abuses of those forms of work commonly called methods. Having its foundation in the real work of the recitation, when the teacher is presumably doing her best, the whole study has a practical bearing very helpful to teachers; and it is free from the generality and abstractness of text-book work in psychology and methods on the one hand, and the artificiality of experimentation on the other. In preparing for such work I would never seek to lay down conditions favorable to experimentation; but rather to lay down conditions which will secure good teaching. The only experimentation allowable is that which can be done incidentally, while the best possible work is being accomplished.

As Viewed by the Supervised.

By Sarah C. Brooks, Supervisor of Kindergartens and Primary Schools, St. Paul, Minn.

By accepting a position in any system of schools, a teacher tacitly accepts a certain form of government, about which, in the main, she need not trouble herself. Her freedom lies not in changing the existing order of things, but in devising ways and means of applying plans of instruction and methods of discipline to the development of the individual child, for whom the whole system exists. This freedom, wisely used, will insensibly react upon the whole plan, just as in any other department of life the best efforts of the individual react upon his environment for its improvement.

The more comprehensive and liberal the conditions under which one labors, the greater the opportunity for individual progress and the more rapid the general advancement. It is, therefore, important that those who control these conditions lose no opportunity of acquainting themselves with the workings of the system, and with all due speed to modify the same, when necessary, to suit conditions.

By viewing the matter of supervision from the standpoint of the intelligent teacher, that which seemed liberal and helpful, or necessary under the circumstances, may be seen to have the contrary effect from the one intended, and a re-adjustment found necessary.

The teacher is encouraged to be critical while standing as interpreter between the child and the plan of instruction. She is also expected to be able to pass judgment upon the plan as a whole. By this means is she able to put life into dead form, and to apply the same to the development of the child. To heed the criticisms made, thoughtful, shrewd, witty, with a mind open to conviction is to be still "plucking the grass to see where sits the wind."

SOME OF THE CRITICISMS.

From the mass of material at hand, I have endeavored to select a few of these criticisms, which may be considered legitimate and worthy of the consideration of the supervising force, because they have a direct bearing upon the efficiency of the schools. The points touched, briefly stated, are dates of entrance into the kindergarten and first primary room, the course of study, meetings, the supervising force and the teachers' tenure of office.

1. The first of these may be local, but the criticisms are of so fundamental a nature that they seemed to me to deserve mention. Where admissions are made to the high school twice a year, it is necessary to rearrange classes in the district schools at the close of the first semester. This re-arrangement leaves some one or more rooms without its quota of pupils. To fill these rooms, children are removed from the kindergarten to the primary rooms, and new pupils admitted to both places, according to age and conditions. The weather being inclement at this season, comparatively few pupils enter. A most important sequence of work is broken in the kindergarten. The kindergarten children enter the new field under circumstances detrimental to a successful beginning, because they must cope with pupils who undertook the grade work five months previously. Nature and the child are not in accord, so far as topics for observation are concerned, and both pupil and teacher are placed at a disadvantage. In April, when the world is again new, when weather is propitious and all things in harmony, another class enters, necessitating another change of classes, and a loss of much precious time to the children in the efforts at re-adjustment. By this clumsy and illogical method certain classes pass through the hands of three teachers in one year, at an age when, timid and shrinking, they need the most careful nurture.

THE COURSE OF STUDY.

2. Comments made upon the course of study are of a more general nature, and have a wider significance. Selection and arrangement of topics frequently prove impracticable because they lack the verification of test before adoption. A study of the whole plan reveals a lack of unity which should result from a continuous and critical consideration of the whole field of instruction by the entire supervising force. Instead of the one mind evident through all subjects, evidence too frequently points to a compilation. Aside from this, plans are too vague and indefinite, and are subject to a variety of interpretations and applications in the various schools, individual teachers being frequently a law unto themselves in the matter.

MEETINGS.

3. Criticisms of meetings come from great numbers of teachers, touching number of meetings, time of meetings and matter presented. The greater the number of supervisors and special teachers, the heavier falls the burden of meetings, making grievous inroads upon time, strength, and money. If the justice of this comment is doubted by any one present, perhaps a term's trial of teaching fifty children at \$45 a month might convince the doubter, especially if he should reside a few miles away from the school, and from the points at which meetings are held. As a final touch, let the meetings be held between

the hours of four and five, when body and soul are at the lowest ebb.

EXACTIONS TOO SEVERE.

4. Springing from the same root are two comments made upon the supervisor or special teacher in the regular visits from school to school, and their remedy is the same. They say criticism is destructive and discouraging, leaving the teacher without clearer views of what should be done, and too frequently without inspiration to seek a better way. It is also frequently claimed that special teachers give no help outside their immediate work, and make such enactments upon time in preparation and upon the program as are impossible to be granted. The last note of "disharmony" is reached when the teacher asks: "In case the principal objects to this plan, whom shall we obey?"

PROMOTION OF TEACHERS.

5. My last topic is that of appointment and advancement of teachers, and the dismissal of the incompetent from service. Principals and supervisors have cause to regret the appointment of teachers to a grade without sufficient inquiry as to their fitness for the place, and sometimes without fitness for any grade. This makes special trouble in the first year's work. There is also a feeling that the probationary period should be extended to a greater limit than is usually assigned. Many faithful teachers feel that promotion is not so dependent upon effort and excellence as it should be, and the inference is universal, that influence is the greatest thing in the world, that not ing to mind, perhaps, the remark of the unjust judge, that not for fear of powers above nor below would he grant the woman's petition, but lest she weary him. The perennial complaints of the inefficient are that no one tells them they are failing, and no one criticises them. Further comment is unnecessary.

ADMISSION OF PUPILS.

Bearing in mind that the first subject of criticism was the dates of admission to kindergartens and first primary rooms there seems but one suggestion. Admit in September and April, when conditions are right, because nature and the child are in unison. If possible, arrange to have the teacher who receives in September keep her pupils through the following June, giving the April classes to another teacher, who will give them over to the care of some one else the following April. This arrangement will save from two to three months to the child in uninterrupted progress, and give him time to have many habits fixed under the new guidance of skilled teachers, before he is compelled to form the acquaintance and learn the ways of another. In the kindergarten, pupils entering in September would remain for the year, as, also, those in April, provision made for both divisions, in double sessions, as is necessary in the crowded portions of the city.

VITALITY OF THE COURSE OF STUDY.

The course of study should have three points considered in its construction, in order to reduce friction to the minimum: It should represent the united efforts of the supervising force in council. The theory of the supervisor should, in all grades, be tempered by the practical suggestions of the best teachers in those grades. It should embody no plan which has not been previously tested in the school-room, and for which ample arrangements have not been made to help teachers to a clear understanding of the same. It should be a growth from within, outward, susceptible to change from year to year from its very vitality.

Once presented to the schools, it should form the basis of many meetings, in which principals and plans are first discussed by superintendent, supervisors, and principals, and then by principals, and teachers. New plans of work presented in this way would remove a source of misunderstanding between supervisors and principals, and do away with a whole series of meetings, at a central building. Formulated and duly discussed, it should be enforced equally in all schools. Without this last we have anarchy, and not system, and must contend with the discontents and jealousies aroused by unequal distribution of burdens. In this case, what, say you, will become of the progressive and ambitious teacher with genius and originality? There is abundant room for the exercise of every splendid quality in adapting the plan to her school; and if her experience proves something radically wrong in the plan, no one will be more gratified than the superintendent to modify conditions. The province of the superintendent, with his assistants, is here clearly indicated. The general plan belongs to him.

CONFERENCES WITH TEACHERS.

One relief in numbers of meetings was suggested above, when it was recommended that the course of study and all new plans of work presented later, be presented to principals first for discussion and explanation, and later, by principals to the teachers under their charge.

The greatest harmony should exist between the supervising force and training school as to matter and method, and many conferences be held by them in which critic teachers, or directors of practice participate. Thus only will new teachers en-

tering the schools be prepared to receive in the right spirit, and with intelligence, the criticisms and suggestions of supervisors. This trouble obviated, it only remains to deal with a limited number who need the help of meetings for criticisms, and the number will decrease from year to year. Indianapolis is a beautiful example of this harmonious arrangement, and the spirit of its schools reflects the wisdom of the practice.

Each special teacher should be granted a specified time for meetings, varied according to the degree of technical skill required by the teachers in his department, after which time meetings are to be confined to teachers needing special help, and to presenting new plans of work. Thus, with a specified portion of time devoted to the training school, sufficient instruction can be imparted without regular meetings from week to week. By this arrangement leisure may be afforded for meetings, general and classified, in which the mind of the teacher is lifted above the wearisome details of work, to the contemplation of higher things, and her desire for culture satisfied by the consideration of subjects in an orderly manner, impossible under existing circumstances.

HARMONY OF ACTION.

It is essential to all entering upon the work of supervision to have a clear notion of the province of criticism. To most people it is synonymous with fault-finding in the disagreeable sense.

The complaints arising from exactions of special teachers, from multiplicity of directions, and from conflicting orders, all arise from one source, which is a lack of that unity of purpose which, for the sake of harmonious action in the consummation of a desired end, one is willing to subordinate self and individual plans, and to consider his work as but a fraction of a great whole.

To see that these matters are carried out in detail, and that teachers have sufficient technical instruction to introduce any new subjects introduced into the course, the superintendent's hands and his brain must receive aid. Hence, have been added, in recent years, a corps of men and women who are supposed to labor in unison to carry out the general plan. Men and women seek advancement naturally, and are eager to accept office too frequently without pausing to consider the position a public trust, and their own powers to fulfill the obligations imposed by rank. Have we wisdom, insight, justice, moderation, discretion? If not, a burden awaits us more grievous than that which chafed the shoulders of Pilgrim, and a veritable Slough of Despond obstructs the way.

APPOINTMENT, PROMOTION, AND DISMISSAL.

The last matter, which, while seemingly simple, is, in fact, the most complex of all. Fitness for the position should be the only test of appointment and promotion, and unfitness attended by dismissal. The superintendent, in conference with his assistants, should be the sole judge of fitness or unfitness. How simple a case it seems. And yet the superintendent and the board of education, while probably desiring to be just and faithful in the discharge of these duties, are so besieged, menaced, flattered, and cajoled by an army of people, who, for personal, political, business, social, or unclassified reasons, desire the appointment, promotion or retention of some one or more persons, without consideration of age, fitness, or previous experience.

Appointments from without the city are largely ruled by examinations, and followed by probation, which should be clearly understood by the teacher, the principal under whom she works, and the supervisor and special teachers immediately interested. In confirmation, promotion, or dismissal, all parties officially interested should be consulted, so that no room for prejudice be given. Candidates from the training school should come in the order of excellence presented by the principal and critic teachers, and not in the order of personal interests, or the degree of sympathy one may have been able to arouse in some member of the board, the mayor, minister or other prominent person.

A more trying class still remains to be considered. The applicants may or may not have taught, may or may not have had previous preparation. Through financial or domestic misfortunes, influential friends make out a strong case in their favor, pleading their need, their qualifications, but the candidates themselves are unable to pass the examinations. Duty seems plain, but the various lights turned upon it distort the perspective. Who is able to grapple with these cases in all their complexities, and who is willing to shoulder the responsibilities of acceptance or rejection? Courage to do the right can only come from a clear understanding of the province of the public schools.

Evils surrounding the dismissal of incompetent teachers can be lessened by extending the time of probation, and by preparing a list of unsatisfactory teachers early each year, to be placed in the hands of superintendent, supervisors, special teachers and principals. These teachers should receive special care from the supervising staff, and clearly understand their position. If improvement has not been made at the close of the year, they are to be recommended for dismissal. It will be urged that in the event of informing the teacher of her standing, the case is often complicated by the army of sympathizers

she is able to enlist in her behalf. I grant the danger, but see no other honorable position to take in relation to the teacher, and a position once assumed must be consistently maintained, even in the tempest following announcements. Honest and fair means have been used throughout. Honor compels a stand to be made. If these are restored to position, it must be done over the veto of the chief, and the consequences be upon the heads of those who pass the measure.

SUPERVISORS WITH MORAL STAMINA.

The above may seem heroic measures, and more in accord with dreams than reality; but after years of scorching experience, I am still convinced that what the city needs is men and women with moral stamina, who are willing to abide by opinions, based upon personal knowledge of the situation, reinforced by the opinions of co-laborers, liberal minded, and competent to judge.

RELATIONS BETWEEN SUPERVISOR AND SUPERVISED.

In conclusion, there needs to be established throughout the system of schools a feeling that, whatever the circumstances, those at the head are actuated by professional motives, as opposed to personal ambition, that those in authority are not unmindful of the difficulties which surround the individual teacher in her efforts to carry out the general plan and regulations of the system. A spirit of fairness must encourage the best efforts of supervised and supervisor, and a feeling of confidence in the head of the system as courageous "to do the right, as it is given him to see the right;" he has not only a mind to direct, but a heart to respond to the labors of the individual in whatever capacity he may serve. A spirit of harmony must direct the efforts of the whole supervising force, in order that harmonious action may be obtained in the schools. Otherwise, the body defeats the ends for which it was appointed.

THE SUPERVISOR AS TEACHER.

But the supervisor should not limit his work to this kind of study. A similar study of his own work should be made. He should teach the teacher's class in the presence of the teacher, doing the very best teaching of which he is capable, under all the limitations which affect the regular teacher in the same work. When the work has been done, the same careful analysis should be made of it as was recommended for that of the teacher. A searching criticism should be made upon the work of the supervisor himself, extenuating no fault, and magnifying no merit; but calmly and discriminatingly examining it as a work of art. When the supervisor has done the best he could, let him stand or fall in the estimation of the teacher by his own work.

The advantages of this teaching side by side with the teacher are incalculable, many of them being in the interest of the supervisor himself. The close and constant contact with actual children, under actual conditions, keeps the supervisor's mind in a sane condition as respects criticism; while the evident absence of any attitude of unfriendliness will operate to make the study a fruitful one to the teacher. While the teacher may not reasonably be expected to be able to supervise, the supervisor may reasonably be expected to be able to teach. If he will actually do so in the presence of his teachers, he will effectually disarm criticism of his own criticisms.

I have touched thus inadequately upon but a few of the numerous duties which fall within the province of the superintendent or supervisor in a system of schools, larger or smaller, as the case may be. It is true that if the system be small, these duties may all fall to the lot of one person. In a larger system there may be many supervisors, among whom a division of work may be made more or less rigorous in its separations. So far as may be, in my judgment, it is best for each superintendent to engage in several or all of these functions to the end, that he may retain his freshness of touch and his sympathy with children. He is less likely to become arbitrary in his judgments of work and of teachers.

PROMOTION AND DISCHARGE OF TEACHERS.

I shall speak of but one function more. This belongs to the superintendent as supervisor. I refer to the selection and discharge of teachers. Having set the standard of work, no one else can be so competent as he to find the right people to do this work. A poor teacher sometimes saves a good school by failing to be re-appointed. No one knows these opportunities better than the superintendent who has seen her teach, and who has faithfully tried to make her capable of doing the work well. Whatever other complications may grow out of the matter, I believe it essential to good schools that the superintendent should, either by law, or by consent of the school board, have the selection and assignment of teachers. This involves, of course, the promotion of teachers for improvement and the discharge of the incompetent. This procedure may sometimes work to the end of shortening the official life of the superintendent; but even this would not be an unmitigated evil in some systems. At least while he did remain in office he would be able to direct the work to some purpose; and when he was gone, the ground would be clear for his successor.

Principal Duties of Superintendents.

By C. F. Carroll, Superintendent of Schools, Worcester, Mass.

No teacher in entering a school-room should disturb the current that is moving on there. The superintendent at such meetings may become a nuisance.

It has been affirmed that the principal business of the superintendent is (1) to give written tests to the schools; (2) to test orally the work of the children; (3) to listen to the work of the teacher; (4) to hear classes; (5) to conduct teachers' meetings, and (6) to place ideals before teachers.

Concerning the first of these, it must be said the principal use of any test must be to determine neatness, accuracy, and form. It can never show the best that a teacher is doing; much less can it show the best of which a pupil is capable. All culture subjects, in which we may include reading, geography, history, nature work, literature, music, and manual training, cannot be satisfactorily worked out upon paper. Culture subjects depend upon instincts, upon feeling; they imply horizon, relations, soul. Any focusing, such as is called for in written examinations, tends to sacrifice the larger side. In fact, testing is almost fatal as we learned by sad experience under the old regime.

Written examinations by the superintendent will show the principals and teachers what points he desires to emphasize, but they may become dangerous for that very reason. Tests should be given frequently by principals and teachers themselves. High school teachers throughout the country generally give many tests. These may be very effective, yet tests cannot take the place of teaching. The test should generally be a trial not of the pupil's knowledge so much as of the teacher's skill. An unsuccessful test implies poor teaching.

The next three points, namely, the oral test, watching the teacher's work, and teaching by the superintendent, are a unit, and may be considered together. It is something of an art for a superintendent to know how to enter a school-room. The current of the class should not be interrupted by the entrance of the superintendent. A pleasant greeting is important; anything more is likely to become a nuisance. Bluster and much conversation remove responsibility from the teacher. Many superintendents never seriously listen to a recitation. Many others never take part in a recitation, because they have never learned to do this. A supervisor should identify himself with the school work at this most vital point.

At the teachers' meeting the superintendent stands at the center of the system. If he has visited intelligently and recently, he can mold instruction to the full extent that his skill will permit. He should get down to a few essentials in drill work; he should show how to teach reading, the tables, interpretations of problems, making of sentences, and other technical details.

The superintendents and teachers are engaged in a profession and must do hard work, as is the case in any other profession. The enterprising teacher can always be recognized, because she will always anticipate the superintendent. The good teacher works up old material every day as a review. The old-fashioned examination is scarcely called for in her scheme.

AS STUDENT OF THE CHILD.

But the pupil himself calls for our first consideration in this discussion. An improved knowledge of the child is changing theories of training teachers and, consequently, changing methods.

School hygiene is given the first place in pedagogy, and in the conventions of leading teachers. This is a good beginning, but we need to consider, also, the growing body, its energy, the dynamic force that works upon the organism of every child, that compel movement and growth. Biology has come to be the best part of physiology; physiology the best part of psychology. The well-nourished child, living with cultivated people, will attain to their estate with a minimum of formal teaching. The lack of proper food produces a child deficient, both morally and intellectually. The most interesting spectacle because the highest product of civilization, is the well-nourished child, abundantly active, free from unnecessary restraint, with interests that call into activity the many sides of his nature, moving on from one stage to another, absorbing the best things. The emotions and instincts of a child are said to be more important than the intellect. They condition even perception. The restraint of affection and the restraint of normal interests have been the marks of modern education, and their full restoration to their proper places constitutes the first problem of the modern superintendent.

SOCIAL DEMANDS.

Another hopeful indication is the presence in the programs of educational meetings of subjects relating to social forces that are co-ordinated with the school. We often lose our perspective, and forget the part that the home, the church, literature, art, and society, play in education. The 'three R's' contribute only a small part to intelligence, but our surroundings are all-powerful. The course of study must be based upon these considerations, and our methods must be in line with

them. Teachers should be thrown upon their own resources. Standards are authoritative; methods, art, and ways and means are incidental.

Our best teachers, our best citizens are alive to all the questions that I have raised. Our best teachers are both broad and skilful. Woe to us if they outstrip us in their grasp of great questions; woe to us if we fail to do so much as to be able to interpret their art and intuitions, and to be able to both learn and impart the wisdom that they can teach.

Skilled School Supervision.

THE MASSACHUSETTS SYSTEM.

VOLUNTARY GROWTH OF SKILLED SUPERVISION.—Skilled supervision of schools has been tried in towns and cities of Massachusetts of all possible grades and conditions. Wherever given a fair trial it has resulted in great good to the schools. It has thus far grown up in a voluntary way, but the limits of voluntary action have nearly been reached. It should now become by legislative requirement the universal and permanent policy of the state.

EXTENT OF SKILLED SUPERVISION.—The number of towns and cities at present employing school superintendents is 259. The number of superintendents is 151. Of this number 50 are district superintendents for 148 towns, most of the remaining 111 towns and cities having one superintendent each. These 259 towns have a population of 2,353,858 and contain 91 per cent. of the schools of the state and 93.8 per cent. of the pupils. The 94 towns not under supervision have a population of 146,325 and contain 9 per cent. of the schools of the state and 6.2 per cent. of the pupils. Eighty-two of these 94 towns have a valuation under \$2,500,000.

RESULTS OF SKILLED SUPERVISION.—Some of the prominent results of skilled supervision to which school committees bear witness are the following:—

1. Better teachers and better directed teaching effort.
2. More regular attendance of pupils.
3. Better classification and progress of pupils.
4. Greater unity of effort throughout the various grades.
5. Greater care in the selection of text-books and supplies.
6. Economy in school expenditures.
7. Increased interests in the schools on the part of parents and tax-payers.

COMPULSORY FEATURES OF EXISTING SCHOOL LAWS.—The state has now various compulsory school laws, among which are laws requiring or determining the following:—

1. The town system in school management.
2. The support of a sufficient number of schools.
3. The maintenance of high schools, manual training schools and evening schools.
4. The minimum length of time that the schools shall be kept.
5. The election of a school committee.
6. The certification of teachers.
7. The attendance of children within certain age limits for a fixed length of time.
8. Free text books and supplies.
9. Free high school tuition for every qualified pupil in the state.
10. A minimum tax to be raised by each town for school purposes.

REASONS WHY THE STATE SHOULD MAKE SUPERVISION UNIVERSAL AND PERMANENT.—Some of the reasons why the state should insist upon competent supervision of all its schools are the following:—

1. Because supervision has improved the schools in a marked degree wherever it has been given a thorough trial.
2. Because it is the duty of the state to insist upon a wise expenditure of the money so liberally appropriated for the support of the public schools.
3. Because it is for the best interest of the state to have a settled and permanent policy in the management of its schools.
4. Because many towns cannot make suitable combinations and be conveniently grouped into districts until supervision is required of all.
5. Because supervision cannot become universal except by making it mandatory and providing for the formation of districts when the towns themselves cannot effect unions.
6. Because many of the towns not under supervision desire such legislative action. Nearly forty towns have at different times voted in favor of uniting with other towns to secure supervision, but have been unable to effect unions.
7. Because in the towns indifferent or opposed to supervision many intelligent people desire it and are persuaded that the majority will come to appreciate it, if it has a fair trial, just as the majority of the people everywhere else have come to do so.
8. Because the schools will fair better if the energies heretofore expended in securing and maintaining supervision as a policy are concentrated upon improving supervision in quality.

LEADING PROVISIONS OF PROPOSED LEGISLATION.—The leading provisions of a supervision bill to be presented to the legislature the present session are the following:—

1. Supervision to become the fixed and universal policy of the state on and after July 1, 1898.

2. Towns having a valuation above \$2,500,000 to be permitted to unite through the action of their school committees in the employment of a superintendent of schools.

3. Towns having a valuation less than \$2,500,000 to be formed by their school committees into union districts for the employment of superintendents of schools.

4. State aid for each district to be \$1,500,—\$750 for the employment of a superintendent and \$750 for the salaries of teachers.

5. School committees of a district, unless it is otherwise provided by themselves, to have a vote in the selection of a superintendent proportional to the town's share of the expenditure for the superintendent's salary.

6. Towns with a valuation less than \$2,500,000 to be permitted to unite with a town above that valuation in the employment of a superintendent, the former to receive proportional aid from the state.

7. The state board of education to have authority to arrange districts and district boundaries for towns not in districts on or before July 1, 1898, and for towns thereafter unable to effect unions.

8. Districts with less than twenty-five schools permitted to be formed with the approval of the board of education.

9. Unions to be subject to reorganization July 1, 1900, and at intervals of five years thereafter.

10. Superintendencies existing at the time of the passage of this act not to be invalidated.

THE MASSACHUSETTS SYSTEM.—Nearly every state in the Union has compulsory supervision by superintendents, but the unit for such supervision is the county, which is too large for personal visitation. The office is too often a political one, and the service rendered is largely of a clerical kind. Under the Massachusetts system of district supervision the unit is a small group of towns wherein frequent visitation of schools is the rule, the office is not political but professional, and the service rendered is distinctly educational and uplifting.

ENDORSEMENTS.—Universal and permanent supervision by superintendents has been recommended by the state board of education, by the secretary and agents of the board, by the state association of teachers, by the late Governor Greenhalge and by Governor Wolcott. The most conspicuous and unique feature of Massachusetts supervision—that of district superintendence—is admitted by the United States commissioner of education, by the committee of the National Educational Association appointed to consider plans for improving rural schools, and by experts generally, to be the best system yet devised in this country for advancing the interests of schools in small and sparsely settled towns.

(From a circular issued by the Massachusetts State Board of Education, January 8, 1897.)

A New High School.

The Pittsfield, Mass., high school occupies a pretty site, fronting on the public common. The building is 138 feet long by 136 feet wide, and is of yellow front pressed brick on a sub-structure of Lakeville marble, white Lee marble being used for the horizontal bands, window sills and lintels, while the main cornice and all ornamental features are of white terra-cotta.

The front and the side entrances are built entirely of white marble with white terra-cotta decorations. Their majestic proportions, together with their snowy whiteness, make them stand out boldly from the yellow background. The roof is slated and all leaders, gutters, finials, and crestings are of copper.

The structure is purely classic, and even the smallest details were designed with a view to their absolute purity of style, as well as to their fitness for the purpose of a modern school-house.

Besides the twelve class-rooms, each of which can accommodate 50 pupils, the building contains several recitation rooms, a large library and an auditorium which, with its unusually large floor space, its height of three entire stories, and its ornamental balconies, forms one of the most interesting features of the building.

The principal's office, reception rooms, and the private rooms and studies of the instructors are all that could be desired. On every floor are well-ventilated cloak rooms and toilet rooms. Great pains have been taken to secure the latest sanitary improvements. On the upper floors are roomy physical and chemical laboratories, lecture rooms, and apparatus rooms, and connected with these are a photographic dark room and a drawing room.

The system of ventilation throughout the structure is particularly interesting. In the basement is located a large gymnasium, also training and play rooms.

The interior of the school is finished in oak, and in coloring the walls, the architects were careful to select those tints which absorb a minimum of light while offering repose to the eye; indeed, no detail has been overlooked which could contribute to the comfort and welfare of teacher or pupil.

The plans were made by Messrs. Pierce & Brun, 114 Fifth avenue, New York city, a firm who have devoted the last ten years mainly to school architecture, studying the subject in all its phases in this country, and keeping in touch with the progress abroad by correspondence with the government architects of England, France and Germany.

Among the most important school buildings designed by them, besides the Pittsfield high school, are the following: State Normal school at Jamaica, L. I.; Woodside high school, L. I.; Princes Bay school, Staten Island; Pittsfield, John street school, Mass.; Hollis school, L. I.; Phillipsburg school, New Jersey; Corona high school, L. I.; Corona primary school, L. I.; Winfield school, L. I.; Glendale school, L. I.; East Williamsburg school, L. I.; Amityville school, L. I.; Asbury Park high school, N. J.; Asbury Park primary school, N. J.; Asbury Park, colored children school, N. J.; Tottenville school, S. I.; Maspeth school, L. I.; Middletown high school, N. Y.



NEW HIGH SCHOOL, PITTSFIELD MASS.—Pierce & Brun, architects, New York City.—(See description above.)

School Reports.

State of Maine.

In his annual report State Supt. Stetson refers again to the investigations which were mentioned in his report of last year. The new figures are compiled from the answers to a series of questions sent to each of the 513 school superintendents in the state. Some of the questions were as follows:

"What are the most encouraging things in your school?" "What are the most discouraging?" "In what way do the parents hinder the work of the schools?" "In what way do the churches interest themselves in schools?" "Have the politicians of your town exerted a helpful or harmful influence over your schools, or in selection of teachers?" and "Are you in favor of a law providing for state examination of teachers?"

The question about political influence was answered in the main, that it neither helped nor hindered. The question as to the most discouraging thing, received a variety of answers, such as lack of suitable buildings and grounds, the apathy of parents toward schools and teachers, criticisms of parents, the tender age at which scholars leave school, and listlessness of pupils.

Among the encouraging things were "increased obedience and desire to study," "more rural pupils in high schools," "general demand for better teachers," "willingness to provide more money for schools," "a realizing sense of the fact that we are not up to date," "a desire from the children to be graduated."

"In what way do parents hinder the work of the schools?" was usually answered by, "By upholding children in bad behavior." Other reasons given were "By finding fault with the teacher before the children," "by not getting acquainted with teacher or the school," "by allowing the children to lose sessions or days," "by ignorance of modern methods," "by not voting money for free high school or books, and giving \$25 for repairs," "by wanting children to go too fast."

QUALIFICATION OF TEACHERS AND SUPERINTENDENTS.

Mr. Stetson finds much division of opinion on the question of demanding a state examination of teachers, and much of the opposition comes from superintendents who are teaching themselves, or who have relatives who teach. It is a noteworthy fact that 17 per cent. of the teachers of the state are relatives of the superintendents.

44 per cent. of the teachers have not attended an educational meeting during the past year; and 34 per cent. have not been required to pass the examination prescribed by the state; 38 per cent. have taught but one term where they are now teaching; and 8 per cent. have taught one year in the present position; 27 per cent. have taught less than one year in all; 2¼ per cent. have taught ten years; 98 per cent. never read a book on teaching, and 62 per cent. never read an educational paper.

Supt. Stetson also gives some interesting data concerning the superintendents. 16 per cent. received their education in common schools; 4 per cent. never went to school; 65 per cent. have been teachers, leaving 35 per cent. who have had no experience in school-rooms; only 4 per cent. give their time to superintendence; 35 per cent. are farmers, 21 per cent., teachers, and 5 per cent., housekeepers. The rest are professional or laboring men.

WASTE OF FUNDS.

The report lays much emphasis upon the waste of the state's money, which, if properly applied, could do for the schools all that they need. The sum expended during the year for schools was \$1,766,323.07, an average of \$555 for every thirty pupils. The average amount expended for text-books for five years is \$91.366, an average of 94 cents per annum for each child.

Under "waste," Supt. Stetson places poor buildings, bad locations, and drainage, and poor ventilation. The practice of employing teachers who will work for the smallest sum has been carried so far that much of the money thus expended is a total loss. "The lowest estimate that can be made of poor teachers is that one-fifth of our teachers are not qualified for the place they occupy. This means that 1,000 teachers in the state are failures as instructors."

The following is the plan proposed by Supt. Stetson:

SCHOOL-HOUSES AND GROUNDS.

"The first thing to be considered in the improvement of the rural schools is to devise ways and means of improving their physical surroundings. It is impossible to transport children long distances until the country roads have been very greatly improved.

"School lots in country communities should not be less than one acre in area. The land should be thoroughly drained and attractively located. Plans for out-houses and school buildings should be prepared by experts, and the erection of these buildings should be in charge of those who are competent to do work of this kind. The furniture should be of such character as to be suited for the purpose for which it is used.

"We pay more than we need to for school lots, the erection of school buildings, the furnishing of school appliances, text-books, fuel, making repairs, etc. The waste along these lines aggregates more than one-third of a million of dollars each year.

TRAINING OF TEACHERS.

"The next vital point with us is the matter of the training of school teachers. I believe in teachers getting their academic education in the high schools, seminaries, academies, or colleges of the state. I believe that our normal schools should give their entire time to professional training, so that a teacher who is a graduate of any of the institutions mentioned above could get her professional training in a comparatively short time. We are also making a fight for grouping of towns for the purpose of securing expert supervision.

"We are to take up, consider carefully, and work out as fully as we can, a plan for interesting clergymen, lawyers, doctors, manufacturers, business men, mechanics, and farmers in the public schools. We find that these people know nothing about the schools, because they do not visit them, and practically care nothing about them."

A STATE BOARD OF EXAMINERS.

The changes proposed by Supt. Stetson have been incorporated in a bill which has been introduced in the senate.

The substance of the bill is as follows:

It advocates the appointment of a state board of examiners by the governor, and an appropriation of \$1,300 to meet its expenses. One member shall be chosen from each congressional district to serve for four years, one member retiring each year. The superintendent of schools shall be ex-officio president. Each member shall receive \$5 each day while examining teachers, and local examining conductors shall receive \$2 per day. Three grades of certificates will be granted, to be valid for five, three, and one years, respectively, and towns which employ teachers without certificates shall forfeit 25 per cent. of the state school fund.

Another act introduced provides for the division of schools into groups of three, five, and seven classes in towns. At the election this month, towns shall determine as to the divisions, and the following month voters of each class shall choose a manager, who will be in charge. The managers shall constitute the school board. An amount equal to the amount paid by the state in '96 for free high schools shall be appropriated for their support, and the support in each county shall be all under a county superintendent named by the government.

SCHOOL INSPECTION IN NEW SOUTH WALES.— MANUAL AND INDUSTRIAL EDUCATION.— MUTUAL ASSURANCE.

New South Wales.—The inspectorial staff comprises a chief inspector, nine district inspectors, and twenty-five inspectors. Schools are classed as high, public, half-time, provisional, house-to-house, and evening public schools. Besides these the state supports the Sydney grammar school, two industrial schools, and the school for the dumb and blind. The public schools have improved one per cent. since 1894; the half-time schools, two per cent., and the house-to-house, eleven per cent.

Manual training is taught in eleven schools, to 626 students. Cooking is taught to 1,301 pupils. There are 632 public school savings banks, with £6,310, rs. 6d, to the credit of the pupils.

In the training schools for teachers instruction in manual training has been added to the course.

A teachers' mutual assurance association is in operation. The average annual death rate is one-half per cent, and for the last nine years the amount paid annually by each member by way of premium has averaged £110, 9d, or 1¾ per cent. on the sum payable at death.

CONSOLIDATION OF SCHOOL DISTRICTS— CHANGES IN TEACHERS' EXAMINATIONS.

State of Ohio.—From the advance sheets of the report of State Supt. Corson, the country school problem is being met by consolidating the smaller districts. Where the roads are good the children may be conveniently carried to and from a central school, at a slight expense. The plan has gone beyond the experimental stage. Special laws exist, authorizing the establishment of such schools in six counties. One of the first of these schools was located at Kingsville, Astabula county. Several of the outlying districts were consolidated, and the pupils carried to the school at the center of the town in wagons provided for the purpose. The daily attendance has been largely increased, the expense of schooling reduced nearly one-half, and the quality of the work greatly improved. Supt. Morrison, of Kingsville, reports that the daily attendance has increased from fifty or sixty per cent. to ninety or ninety-five per cent. This has been accomplished at a saving of more than \$1,000 to the taxpayers in three years.

There are several changes in the law regulating the examination of teachers. Section 4,074 provides that persons who desire, or are expected to teach in the primary department of any graded school, may be examined with special reference to their qualifications to teach in such primary department only.

PLANS OF IMPROVEMENTS OUTLINED—KINDERGARTENS—BEST TEACHERS IN THE PRIMARY CLASSES—MANUAL, INDUSTRIAL, AND SCIENCE WORK—TRAINING OF TEACHERS, ETC.

Newark, N. J.—As the "annual report" of Supt. Gilbert covers a period of only two months, he does not attempt to report in detail upon the condition of the schools, except in regard to such records as are found in the office. Much of the report is given to recommendation for improvement of the schools.

The board of education has promised the development of the kindergarten as fast as facilities can be afforded. In Supt. Gilbert's opinion no more important step could be taken. "The kindergarten contains the germ of all true education. It is the most completely developed and most satisfactory of all existing educational institutions. The instruction in the formal branches, which constitutes the greater part of the work in most of our elementary schools, is often entirely wasted upon little children. I have seen many instances of cultivated stupidity among children. The work they were required to do was beyond them; it did not appeal to their interests, and did not stimulate their centers of activity, hence they became deadened in feeling and dull in intellectuality, or, if their vitality was too great for this, they expended it in violation of law and order, thus receiving efficient training toward a criminal life. Thus, many of the little children in our schools have received positive injury for the first year or two of their school life. It is unfortunate that the state law prohibits the enrollment of children under the age of five. Our kindergartens should take them certainly as young as four. We cannot catch them too early if we are to make good citizens of them, and I hope that before many years have passed the laws of our state will be so modified that children at the age of four can be received into public kindergartens."

Supt. Gilbert recommends that hereafter no teacher without experience be placed in charge of the lowest primary classes. The best teachers, women of the most wisdom and culture, should be placed in charge of these classes, and these positions should be made desirable by the honor attached to them, and the salary paid.

Regarding manual training, the report says: "We need, in Newark, a carefully prepared manual training course, co-extensive with the grades, and open to every child, and I recommend that such a course be established. In the kindergarten and the primary grades the work can very easily be prepared under the regular teachers in connection with the director of drawing. Beginning with the grammar school, special tools are needed, and I recommend that in the basement of each grammar school, or of certain centrally located grammar schools, a shop be fitted up and equipped with the necessary tools for a simple course in manual training for the boys of all grades."

"This equipment will be comparatively inexpensive, and only a small additional teaching force will be required to give the instruction. A suitable instructor should be secured soon to lay out the work and plan for the equipment of the rooms, and advise with regard to necessary teachers for another year. The crowning feature of the training course should be the Polytechnic high school. It is obvious that such a school cannot be established and fully equipped until there is a place in which to put it, but a beginning should be made, and I recommend that such a beginning be made at the opening of the next school year; that a room be procured, provided with the necessary tools, and a teacher engaged to give instruction in manual training to such boys in the high school as desire to take a manual training course."

Supt. Gilbert calls the attention to the need of more adequate should be put into the grammar schools and offered in the Polytechnic high school.

The work in elementary science is found to be quite desultory. Mr. Gilbert hopes to arrange during the year for field lessons, in which teachers shall take the pupils "to study nature at first hand."

One of the greatest lacks is a sufficient supply of good books. The attention of the board is called to Librarian Hill's plan to make the free library co-operate with the schools, by sending boxes containing fifty books to each of the different schools, to be distributed to the pupils by the teachers.

Supt. Gilbert calls attention to the need of more adequate facilities for the normal and training school. In the course of study more provision should be made for practice work by the pupil teachers.

In the music course the work has been hampered by approaching the subject from its formal side. Teaching form and technique first, is beginning at the wrong end, in Supt. Gilbert's opinion. Children should learn to love music by singing that which they enjoy. The new musical instructor works according to this idea.

FIFTY PUPILS TO A TEACHER—IMPROVEMENTS IN HIGH SCHOOL—THE RECITATION. PROMOTION.

Bridgeport, Conn.—The schools are organized on the basis of fifty pupils for each teacher. Supt. Charles M. Deane believes

this to be too high an average, and urges increase of school accommodation and teaching force, so that the average number of pupils to be taught by one teacher may be reduced to forty and the maximum number forty-five. During last year seventeen rooms had an average membership of over fifty, and in almost any single month about forty rooms would report an attendance of over fifty. Twice during the year it was found necessary to put the primary classes on half-day's attendance. The crowded condition of the schools makes the work of supervision exceedingly difficult. It is almost impossible to maintain a good system of grading because grade lines must everywhere yield to the necessity of equal numerical distribution. Supt. Deane asks his teachers to study especially the peculiar needs of each child under their charge and report; but under the pressure for room this is almost impossible.

The following improvements in equipment have been made: a room for mechanical drawing and one for free-hand have been provided for the high schools. These are fitted up with furniture and equipments after the best possible manner. Another improvement in the high school is the introduction of the lunch room, which has had a most excellent influence on the last half of the session. The continued session from 8.30 to 1 o'clock seemed to call for a provision of this kind.

Supt. Deane has laid great stress on the manner of recitation. In most of the schools there has been a very noticeable improvement of attitude and voice of pupil during recitation. While Supt. Deane holds it true that good school machinery may sometimes accompany good teaching he very much doubts that good teaching can accompany slovenly management.

Vertical writing has been adopted in the lower grades of the schools. Pupils above the sixth grade and pupils below that grade with well-formed hands were allowed to have the option of changing to the vertical style or of continuing the slant. The result was that very few in the lower grades continued to use the slant and very many in the higher grades chose to adopt the vertical system.

In the opinion of the superintendent much of the poor work was occasioned by the low standing required for promotion of pupils. The superintendent will raise the grade of promotion gradually from fifty-five per cent. as a minimum and seventy per cent. as an average, to a minimum requirement in each branch of sixty-five per cent. and an average of seventy-five per cent. It is hoped that after a year or two this rate will tend to make it easy for pupils to pass to other grades because of better foundation work.

TRAINING OF TEACHERS—LIBRARY—PROFESSIONAL ADVANCEMENT—KINDERGARTENS—TESTS OF SIGHT AND HEARING—SUPPLEMENTARY READING.

West Superior, Wis.—The city is now well provided with facilities for training teachers. The training school for kindergartners offers a thorough course and insures a source of supplies for competent kindergartens. A class of fourteen was graduated in June. The entrance requirement is a four-year high school course. The opening of the new state normal school in the city provides for the preparation of teachers in all grades of schools.

During the year the teachers started a library of modern and general culture books which contains about seventy-five volumes. They also sustain a successful lecture course. Professional classes were maintained during the year for the study of science, psychology, pedagogy, and child culture. Meetings for general conference are held regularly. Professional publications are taken by nearly all the teachers.

There are nine kindergartens with 945 children enrolled. Supt. Elson recommends that at least four of these schools be divided, making two kindergartens in each ward. The number of little children in Superior is relatively large. The city is new, families young, the children small, and therefore the kindergartens and primary schools are overcrowded, while there are comparatively few pupils in the grammar grades and high schools. The cost of the kindergarten aggregates \$7,200, making the cost per pupil \$7.61. The cost per pupil in the grade schools is \$23.28.

During the year all the children were tested as to sight and hearing. A large number of children were found to have defective hearing. Making due allowance for inaccuracy of the test it is safe to say that more than one-fourth of the children in the schools are defective in hearing. Tests of the eye revealed the following results: First grade, 21% defective; second, 30%; third, 31%; fourth, 37%; fifth, 27%; sixth, 35%; seventh, 31%; eighth, 30%. These tests led to re-seating the pupils, giving those with defective hearing positions near the teacher, and those having defective sight the most favorable position for light.

The schools are doing a most excellent work in supplying reading matter as part of the regular work in English. Many children have secured cards from the public library. Carefully prepared lists of books have been placed in the hands of the teachers and children to guide their home reading. Sets of books which are used for supplementary reading have been loaned by the public library board.

MARKED PROGRESS IN MINNESOTA—THE COUNTRY SCHOOL PROBLEM—INSTITUTES.

State of Minnesota.—The report of the state superintendent of public instruction shows many evidences of progress. The average attendance has increased forty-one per cent. since the last report. The number of teachers who have taught one year or more in the same district has increased, showing that the children are receiving instruction from teachers whose usefulness has compelled their retention. The increase in number of teachers who are graduates of normal schools is very marked. In the rural districts the improvement in buildings, attention to sanitary conditions, tree planting, improved appliances, free libraries, etc., bear witness that there is an increased interest in educational things. In 1894 the number of libraries in the rural schools was 1,561; in 1896 it was 1,853. Superintendents find that most of these libraries are well selected and are in use by pupils and parents as well.

A great waste of energy is caused by the small classes in the typical country school. State Supt. Pendergast recommends the union of small districts where pupils can be transported without too much inconvenience. He estimates the cost of carrying on a school for eight months as \$360. By allowing \$120 for transportation and \$10 a month more for the salary of a better teacher, there would still be a saving of \$160 a year by uniting two weak districts. Supt. Pendergast thinks that the state should offer state aid to a limited number of schools on condition that they maintain a certain high standard. The sum need not exceed fifty dollars. The requirements should be that state rural schools have reasonably good buildings and equipments, that school be maintained for not less than eight months during the year, and that the teacher employed hold a certificate not lower than a county first grade or an elementary normal school diploma.

During the past three years many teachers' institutes have given way to summer training schools, continuing not less than one month. Institutes are held in the newer counties.

NEW KINDERGARTENS WITH ONE-YEAR COURSE—ADMISSION OF PUPILS.

Pittsfield, Mass.—In his annual report Superintendent Bouton discusses the question of establishing kindergartens as a part of the city school system. By the time the schools open next fall the city will be in a good position to accommodate several kindergartens in the school buildings. He believes that a year's course in kindergarten work would form an excellent introduction to the work of the grades, and would be the best transition from either the home or the street to the school.

Considering the similarity in purpose between the kindergarten and much of the primary work, Supt. Bouton would not plan for a kindergarten course of more than one year. He would admit children of four years, and pass them on to the first grade at five. The establishment of a kindergarten in each of the larger schools would give much relief to the primary grades, without being altogether an increase in expense. Under the present rules, new pupils may enter the first grade either in April or September. In April this necessitates a rearrangement of the classes, and in some cases a general moving up of pupils into higher rooms. If each school has a kindergarten there would be no need of admitting a new class to the first grade in April, and the organization of the school need not be disturbed.

EXAMINATIONS OF PUPILS—MORE SCHOOL ACCOMMODATION NEEDED.

Nashville, Tenn.—The experience of the past few days has convinced Supt. Brown that too much time has been wasted on the quarterly examination. While he would not advocate the disuse of written work as a means of testing the proficiency of pupils, he would suggest written tests at unannounced times as might be thought desirable by the teacher and principal. The time should not exceed one or two recitation periods. "The mastery of subjects is what is needed, and not facts gathered here and there without relation to each other. If a subject is mastered a fair examination can be passed when necessity requires it."

The president of the board of education calls attention to the necessity of more school accommodation for colored children. Fully one thousand children are out of school because of the lack of room. Many white children are attending private schools who would be glad to go to the public schools if there were more room.

Reading, writing, and arithmetic are often considered the essentials, but I believe that the study of particular subjects is not as important as that we send out the children with an ever-increasing capacity and desire to learn.—*Sarah L. Arnold, Supervisor of Schools, Boston.*

Uses of School-Houses.

By Aaron Gove, Superintendent of Schools, Denver, Col.

School-houses are devoted solely to the education of children. The country has \$450,000,000 invested in school-houses. The returns for this investment can be materially increased without increasing the investment. Protestant churches of the country are open to the public a very small part of the time. The same is true of school buildings, though not to so great an extent. It is profitable to provide instruction for the people by lectures, lyceums, scientific expositions and discussion, hence proper for the people's buildings to be used for that purpose.

Objections to the use of churches obtain on account of theological bias and denominational proprietorship. Halls at the court-house are at the people's service; only county seats have court-houses. Assembly rooms are frequently constructed in school buildings, and commonly at the top of the house, with not easy access, and usually at some risk by accident. The public audience admitted to rooms in the school building frequently abuse the room and its contents. A plea is made for the construction of school-houses with a convenient assembly room.

The increased expense would not exceed five per cent. of the cost of the building. The room should be on the lower story, sometimes descending below grade line, with easy access from the sidewalk, so that it can be used without interfering in any way with the regular school.

Any given community of five thousand people, whether it be a neighborhood of a great city, or an individual village community, will make such meeting place of assistance in the instruction of the people. Sometimes a social or scientific subject is interesting the people, and the community is hungry for information upon it, and instructors and lecturers are obtainable, but money is necessary to hire a hall; therefore, admission fee charged, and the advantages are not obtained. A room of this kind should belong to the people. Whatever respectable, peaceable group of people wish in the evenings, or even during the day, to assemble for the purpose of instruction or rational entertainment, should be welcome. If a little library is gathered, it can be in the room or adjacent. Only instruction or rational entertainment should be admitted; sectarian religious meetings, partisan political caucuses avoided. The list of legitimate uses to which it could be put, about which no question could arise, is very long. This almost fetich worship of the school buildings could well be modified.

The same is true of rural school-houses, which should be so constructed as to be useful for the people without interfering with school use. These great, beautiful buildings ought not to remain closed two to three months during the summer of every year. The plea is made for the popularizing of school buildings by constructing in the basement of first floor of each one, at the cost not to exceed five per cent. of the construction price, a meeting place capable of accommodating a goodly number of the people, where they can assemble from time to time, and find warmth, and light, and comfort, without paying extra money therefor.

(Abstract of a paper read before the Department of Superintendence, at Indianapolis, February 18, 1897.)

The Township System.

Rochester, N. Y.—At the monthly meeting of the Associated Principals of Monroe county, the subject for discussion was "The Township System for Rural Schools."

Prof. Chas. D. Seeley, of the Brockport state normal school, explained the workings of the system as he had seen it in Massachusetts. He was in favor of its adoption, though he did not favor a law making it mandatory at first.

Principal Lee, of the Churchville union school, said that he was in favor of the township system, provided it contemplated the reduction of the number of districts by doing away with those schools in which the average attendance was even less than ten scholars.

Prof. Lewis, of the Pittsford high school, summed up the main points in favor of the system as follows: First, high school privileges are given to pupils living remote from the school; second, effectiveness and economy of administration; third, effectiveness and simplicity of organization; and fourth, equalization of the burdens of taxation.

Commissioner Palmer stated some points against the system, though he wished it distinctly understood that he did not oppose it: "It might throw the management of our schools into the hands of a political machine, because the same men who now dominated the affairs of a town could, if they chose, do the same with the schools; second, it might tend to put into the common schools machine work; third, it might put into district schools incompetent instructors who would retain their places irrespective of merit, but simply by reason of a political pull."

At the next meeting the subject of the discussion will be the "Free Text-Books."

There are 3,500 districts in this state which have an average of less than ten pupils; twenty-eight of these are in Monroe county. In one commissioner's district of ninety-six schools, sixty schools have less than eleven pupils.

School Law.

In this department THE SCHOOL JOURNAL publishes monthly abstracts of important legal decisions on questions of especial interest to schools and school officers.

Recent Legal Decisions.

Pertaining to Schools and School Property.

Digests by R. D. Fisher.

Teachers.

(Continued from February 6)

Where plaintiff entered into a contract of employment as teacher with a school district for the term of three months, commencing at a stated time, with option to her to teach the school year if satisfaction was given; and she taught under the contract the three months, exercised the option given her, and remained in the employ without objection another three months, when she was discharged without good or sufficient cause, before the close of the school year: *Held*, that the services rendered after the first three months were performed under said contract, and a new written contract was not necessary to bind the district for the entire school year.

2. STIPULATION—ABSENCE OF—DISCHARGE.

In the absence of a stipulation in the contract to the contrary, under the existing statute, a qualified teacher cannot be discharged at the pleasure of the district, but only where just cause exists therefor.

3. DISMISSAL—LIABILITY.

If a teacher duly employed in the public schools for a specified period is dismissed by the school board, prior to the expiration of the term of employment, without being shown to be incompetent, or for other good cause, the district is liable for the damages sustained on account of such dismissal.

Wallace vs. School Dist. No. 27, Saline County, Neb., S. C., Jan. 7, 1897.

NOTE.—The court in this case has applied the rule of law which governs the breach of contracts for hire entered into between individuals, but the court must not be understood as holding that such an action can be maintained when the contract of employment authorizes the school board or officer to dispense with the services of the teacher whenever it chooses to do so. This contract failed to confer any such power upon the district. The court was obliged to distinguish the case of *Jones vs. Nebraska City, 1. Neb. 176*, where the court held that the legislature had provided a statute empowering a school board to employ teachers and remove them at pleasure; that such statute enters into and forms part of a contract made by the board with the teacher for his services for one year; and he may be discharged within that time notwithstanding the term of his employment. Further, that the court had no jurisdiction to inquire the cause of the removal, nor whether the cause alleged be sufficient.

The measure of damages to a teacher for wrongful dismissal is the contract price, unless it be shown that during the time he was prevented from teaching he was otherwise employed, or was offered employment of a similar kind, etc. The burden is on the district to show this, and when shown it goes in reduction of the plaintiff's demand to the extent of the wages he has otherwise earned or might have earned.

1. CONTRACT WITH TEACHER—RECOVERY OF SALARY.

Action to recover salary as a teacher, under a written contract made with the district board of the defendant district, by which he engaged to teach for a term of ten months, at a salary of \$80 per month. At the end of the seventh month he was discharged, and he sought recovery for the remaining three months under the contract made with the district board of the defendant district, (licensed) teacher in the county. It appeared that, subsequent to the issuing of his last certificate (which was issued for three years) he sent it to E. A. Wilson, who, at the date of the issue, was secretary of the board of examiners, but had, in the meantime, retired from office, and was so changed by him as to make it expire four years from its date, instead of three, as it was first written. The question was: *First*, whether the plaintiff had a valid certificate in force during the term covered by the contract with the school district; and *second*, if it be de-

termined that he had not, whether this is a defense to his action for damages. On appeal *held*:

1. That a teacher's license, issued for three years, cannot be legally extended, by being changed to read for four years, by the secretary of the board of examiners who issued it, after he has gone out of office. Such certificate was invalid, being made to cover the period fixed by the contract by an unauthorized change, rendered the holder disqualified for the period named.

2. Under the statute making invalid any contract to teach school when the person employed does not then hold a legal certificate of qualification (see sec. 5.065 How Stat.) such a contract cannot be made the basis of a recovery of salary, as a teacher.

Bryan vs. Fractional School Dist. No. 1, of Shelby and Sterling Twp., Mich., S. C., Dec 4, 1896.

NOTE.—A teacher in a public school in all the states must obtain from the proper official a certificate of his qualification before entering upon his duties. (*Casey vs. Baldrige, etc., 15 Ill. 65.*) A teacher's authority to teach for the want of a statutory certificate cannot be questioned by either the pupils or their parents. The town or school board alone can raise the question. (*Kidder vs. Chillis 59 N. H. 473; Dore vs. Billings 26 Me. 36*) The requirement is mandatory and cannot be waived. (*Goodrich vs. School Dist. No. 1, 26 Vt. 115.*) A teacher is not authorized to teach, and cannot recover pay without the requisite license, even though the examiner, superintendent, or school board neglects or wantonly refused to examine him. (*Jackson vs. Hampden, 29 Me. 37.*) The certificate must be a valid one. In Michigan, when the law provides that the secretary of the school board may grant a special certificate to continue in force until the time of the next public examination, it was held that a special certificate granted by the secretary to one who had failed to pass the examination four days previous to its issuance was void. (*Lee vs. School Dist. 71 Mich. 361.*) But a certificate being in the nature of a commission cannot be attacked collaterally, on the ground that no personal examination was had, especially is this true in a suit for services. (*School Dist. vs. Sterricker, 86 Ill. 595.*) In Tennessee it is an indictable offense under the law, for the common school commissioners to contract with or employ a teacher who has no valid certificate. (*Robinson vs. State, 2 Coldw. Tenn. 181.*)

II. School Bonds.

SCHOOL DISTRICTS—LOCATION OF SCHOOL-HOUSE—POWERS OF DIRECTORS—STATEMENT.

This is a suit in equity, by which the plaintiff sought to enjoin the school district from appropriating the proceeds of certain school-house bonds to erect a school building on any other location than upon the same site which has heretofore been used for school-house purposes. The bonds were voted to build on the old site. It was admitted in the answer that the district, by its school directors, had purchased a new site for a school-house, and it was averred that said directors had the legal right to select the site of the proposed new building. A temporary injunction was subsequently dissolved, and the petition dismissed; hence this appeal wherein it is *held*:

1. Where the notice of an election recited that it was proposed to issue bonds "to build a school-house on the old site," the ballots also indicating the bonds were to be issued "to build a school-house on the old site," that, in the absence of anything to show that it was impossible to build on the old site, the directors were bound by the vote on the bonds.

2. RIGHT OF APPEAL.

(*McClain's Code, sec. 2,985.*), declaring that any person aggrieved by any decision of district board of school directors, may appeal to the county superintendent, does not preclude the right to an appeal to the courts upon questions involving the authority of the board of directors. Judgment of dismissal reversed.

Rodgers vs. Independent School District of Colfax, Iowa, S. C., Jan. 11, 1897.

NOTE.—There have been many controversies in the courts pertaining to the location of school-houses. It is a fruitful source of litigation. The board designated the old site before the election was held, and the notice of the election fixed that location absolutely. If the court had sustained the action of the school board in this case, it would have authorized boards of directors to mislead electors in voting bonds in a way that might seriously prejudice the interest of school districts.

III. Taxation.

TAXATION FOR SCHOOL PURPOSES—EXTENT OF DISTRICT.

Action to restrain the collection of a portion of the taxes for

the year 1895 upon a large quantity of pine lands owned by plaintiff. There was carried out on the tax roll of said town of Bayfield for that year a large sum, and of this amount \$9,217 being a school district tax was disputed. The trial court found the tax valid, and dismissed the complaint. Plaintiff appealed.

Held, under the statute (Sanb. & B., Ann. St., sec 412,) providing that every school district shall be of contiguous territory and shall not embrace more than 36 square miles of land, lands situated 10 miles from a village cannot be included in the school district of such village, so as to be subject to taxation therein.

Keystone Lumber Co. vs. Town of Bayfield et al., Wis., S. C. Dec. 24, 1896.

SCHOOL AND SCHOOL DISTRICTS—TAXATION.

In an action to enjoin the collection of taxes where it appeared that the county superintendents of B. and G. counties, which adjoin, laid off school district No. 22, in G. county, in 1869 or 1872; and where the records of B. county show that district No. 26, in B. county, since 1874, includes certain residents of G. county in district No. 22, who have, since the latter district was laid off, contributed to the building of a school-house in it, and sent their children there: *Held*, that they could not be taxed to build a school-house in district No. 26, in B. county, under acts 1869-70, authorizing county superintendents of adjoining counties to lay off a district composed a part of both counties, and requiring such district to be reported as belonging to the county in which the school-house is situated. The judgment enjoining the tax is affirmed.

Roberts, Sheriff, etc., vs., Ropp et al. Ky. C. of App., Jan. 16, 1897.

IV. Miscellaneous.

COUNTY SCHOOL LANDS.

The fact that a purchaser of school lands from the county was not an actual settler at the time he purchased is immaterial, if no one claiming a preference right to purchase disputes the validity of the sale.

Cage vs. Perry and Elrath County, Tex. S. C., Dec. 19, 1896.

SCHOOL DISTRICT—CONTRACTS—SEPARATE ACTION—BINDING FORCE.

1. The officers of a school district, acting separately, and not as a district board, cannot make a contract that will be binding upon the school district.

2. Where several warrants were executed by the clerk and director for school furniture, but without any authority therefor from either the district board or the school district; no ratification of the unauthorized acts shown, the consideration for the warrants being the previous receipt of certain school furniture, in 1886, notwithstanding the school district had retained and used the furniture, not offering to surrender it, because the laps of more than five years had occurred the statute of limitation precluded the plaintiff from a recovery.

Thos. Kane & Co., vs., School Dist. No. 112, etc. Kans. C. of App., Jan. 4, 1897.

RULE OF SCHOOL BOARD—PROPER REMEDY TO ENFORCE.

1. Mandamus against a school board is the proper remedy in case of an illegal expulsion of a child from a public school.

2. A rule of a school board requiring all pupils to be vaccinated, to prevent the transmission of contagious disease, is a reasonable requirement, and pupils may be expelled who refuse to observe it.

3. School boards are authorized to enact rules and regulations which are needful for a safe and proper management of the schools, and as long as such rules are not oppressive or arbitrary, courts will not interfere.

Rebenaek vs. St. Louis School Board, etc. St. Louis C. of App. Dec. 14, 1896.

FINES AND PENALTIES—DISTRIBUTION AMONG CITY SCHOOLS.

Upon an application for a mandamus on the relation of a school district to compel the defendant, city treasurer, to pay certain money due to said district, under the statute, as fines, penalties, and licenses so collected, *held*:

1. That the facts recited in the alternate writ of mandamus, unaided by intrinsic matter, must be sufficient to entitle to the issue of a peremptory writ.

2. When fines, penalties, or license moneys are in the hands of the treasurer of a city of the first class, having over 8,000 and less than 25,000 inhabitants, such moneys are properly distributable among the common schools which territorially constitute a part of the city. Judgment granting the writ affirmed.

King, City Treasr., etc., vs., State Ex rel School Dist., etc., Neb., S. C., Dec. 16, 1896.

Pensions for Teachers.

In this department THE SCHOOL JOURNAL presents a series of letter describing plans for the pensioning of teachers. Correspondence is invited. Address all letters to Editorial Rooms of THE SCHOOL JOURNAL, 61 East 9th St., New York.

Chicago.—The teachers are much alarmed because of a rumor that an injunction will be served on the board of education, prohibiting any further deductions from salaries to maintain the teachers' pension fund, which is the plan of the minority, who oppose the present system of compulsory taxation in order to test the constitutionality of the exactment of 1895.

If the law is defeated it is expected that the thirty-five ex-teachers, who are now on the retired list, and draw a pension of \$600 a year, will be deprived of this support. It is also probable that the teachers will lose their assessment money which they have paid into the fund. Nearly \$60,000 has already been paid.

The agitation against the law is said to have started with Principal Henry C. Cox, of the Froebel school. His objections to the present system is that it is not equitable. "It is a compulsory deduction every pay day from our salaries for the maintenance of a pension fund." He argues that the pension fund will one day prove a boomerang unless it is amended, for the time will come when people will say that teachers should not demand large salaries when they have pensions awaiting them. Then, too, Mr. Cox thinks it unjust to tax principals one per cent. of their salaries, which far exceeds the assessment of the grade teachers, and then limit the pension to \$600. Mr. Cox says that most of the principals wish to see the bill either amended or appealed, while some favor a test by injunction.

Meantime, the grade teachers have been holding meetings where the pension law has been discussed. Some were in favor of a compromise to secure the main features of the law. The age disparity might be eliminated, so that both men and women might retire after twenty-five years, instead of having the law as it now stands, requiring twenty-five years for men and twenty for women.

Some of the teachers expressed a fear that the one per cent. assessment would not be sufficient to maintain the fund, and that after ten years it might be completely exhausted.

A suggestion was made advocating that the limit of age be made the same for both sexes, an increase to two per cent. in assessments, equalized according to salary received, and a pension less than \$600. This recommendation did not meet with approval, and it was moved and carried that it was the sense of the meeting that the law remain as it is, and receive a fair trial.

Another meeting recently held was that of a committee of fifteen, appointed by the nominating convention of the board of trustees of the school teachers' and employees' pension fund. The chairman of this committee explained that the following amendments would probably be recommended.

They favor making the required term of service twenty-five years for both sexes, but would add a provision that in case of physical disability retirement may take place after fifteen years of service.

They have also discussed the plan of equalizing the tax levied. As the law now stands, Supt. Lane, who pays \$70 per year, and the principal, whose tax is only \$12 per year, will receive the same pension, which is not to exceed \$600 per year. A grade teacher, who pays a tax of \$8.00 from a salary of \$800 per year, receives a pension of \$400.

The committee is inclined to think that a pension should be proportioned to the number of annual payments the beneficiary has made. Already thirty-five Chicago teachers have been retired, all but one on pensions of \$400, after making but one annual payment. The committee may ask that the board of trustees be empowered to impose a tax of two per cent. if it thinks best.

Many teachers are more radical in their views, and wish to have the law repealed. The line of cleavage is between the high and low salaries. Most of the principals, and many of the higher grade teachers consider the law as unjust, while most of the women teachers wish to keep it as it is. C. L. B.

New Orleans.—There is considerable interest in the subject of pensions for teachers. Plans are being made for the organization of a Pension League.

The School Journal.

NEW YORK & CHICAGO.

WEEK ENDING MARCH 6, 1897.

Kansas is at it again. A number of her statesmen have decided that she must publish the text-books to be used in the schools. Their logic is very simple. A \$100,000 printing plant is needed anyhow, because the state ought to do its own printing. The ordinary printing would not keep the presses busy all the year round; hence, extra-ordinary printing would be added. The publications of text-books by the state is an extra-ordinary undertaking, as the example of California has fully demonstrated; ergo, that's the thing to be done. The benefits are wonderful. At least one hundred persons in the state would be given employment at once. The best talent in the state would rush in to produce books. The little question of royalty would be drowned by the blissful satisfaction that the children could now get the books "at actual cost," whatever that may be. Every child might go wherever he pleases and would find the same books in use in every school. Variety is a pernicious thing, anyway, because it costs the state too much money. The books would all be written by people who can look far ahead into the future, and know just what sort of material to put into them to make changes unnecessary for a century at least. Besides, there could not be any competition, and hence it wouldn't make much difference what the books are. No money would go out of the state. Maybe schools in other states might want the Kansas books, and that would bring money into the state. Why, it is an immense thing, and brimful of promise. Kansas-made books for Kansas schools, one type, one binding, one price, same stuff, for all!

This move ought to be followed up by a bill providing for the state manufacture of standard medicines to be used by every one afflicted with Kansas ills, on the soundly logical ground that what is good for one is good for another. Uniformity in text-books, and uniformity in medicines—let us see what next. Well, perhaps uniformity in dress. A state-made uniform for every Kansan would—But the idea is too great, too glorious to picture out in detail. Keep the ball a-rolling.

Moral character is worth more than ability to read, write, and cipher. This is the standpoint President Cleveland takes in his veto of the misnamed "educational test" provision of the immigration restriction bill, and it is also a fundamental principle of all sound educational doctrine. The suggestion of Mr. Cleveland which ought to be kept in mind when the next immigration bill goes to Congress is this: "The ability to read and write * * * supplies unsatisfactory evidence of desirable citizenship, or a proper appreciation of the benefits of our institutions. If any particular element of our illiterate immigration is to be feared for other causes than illiteracy, these causes should be dealt with directly, instead of making illiteracy a pretext for exclusion, to the detriment of other illiterate

immigrants against whom the real cause of complaint cannot be alleged."

Cornelius S. Bliss, of New York, has accepted the Secretaryship of the Interior, tendered to him, in President McKinley's cabinet, and will have the opportunity of securing the prompt re-appointment of Dr. William T. Harris as U. S. commissioner of education, and of Dr. W. N. Hailmann as superintendent of Indian schools. Both men have the respect of all good citizens who know of their work, and of the spirit in which they discharge their duties; the prominent part they have taken in the development of American education is a matter of historic record; neither of them sought the office, but both were elected, because President Cleveland and his cabinet officers were fully convinced of their eminent fitness for the important positions which, under their administration, have been raised to a higher plane than they ever were able to attain before. If the professional educators of this country had a vote in the matter, Dr. Harris and Dr. Hailmann would both be elected unanimously. Many will remember that when Dr. Harris was appointed by President Harrison, he frankly explained that he had voted for Mr. Cleveland for president. Mr. Harrison declared that political preferences did not concern him, and that by appointing him he was simply acting on the conviction that no better man could be found for the head of the national bureau of education. At the next presidential election he voted for Mr. Harrison, and President Cleveland had the pleasure to re-appoint him. Thus far we have heard of no candidate for Dr. Harris's position, and we feel sure that he will be retained in the nation's service.

President McKinley and Secretary Bliss are both firm believers in clean politics. Mr. Bliss, who will have the appointment of the superintendent of Indian schools, is a broad-minded man, who has repeatedly put himself on record as distinctly opposed to spoils-politics, and in favor of making merit the supreme test in appointments to political offices. If he remains true to his former creed there can be no doubt that Dr. Hailmann will be asked to continue for another four years the valuable work he has done to advance the civilization of the Indian on broadly humane and soundly educational lines.

Still, while all signs point to a re-election of Dr. Hailmann, we cannot conceal the humiliating and discouraging fact that a tremendous pressure will be brought to bear on Mr. Bliss and President McKinley to give the office to one who has taken an active part in partisan affairs. Dr. Hailmann has been strictly and enthusiastically devoted to his great work, and has not allowed politics to deprive him of any portion of his time. That seems to be sufficient reason to hordes of hungry spoils-hunters to ask for his office, pointing to the services they have given to the party, and the partisan influence back of them. But we have faith in Mr. Bliss; he has backbone, and is not easily frightened by partisan clamor, and he is also clear-sighted enough to look through the stories the office-hunters have cooked up to prove that there ought to be a change in the office of superintendent of Indian schools.

How highly the educational leaders of the country think of Mr. Hailmann's work, and how thoroughly

they are agreed that he ought to be retained in his present position may be gathered from the following resolution, adopted by the Department of Superintendence of the National Educational Association at its meeting in Indianapolis two weeks ago:

"We hereby give expression to our hearty approval of the action of the executive of this government in appointing as superintendent of Indian schools one who had been closely identified with the educational interests of this country, and especially with the administration of the common schools, and that we cordially indorse the conduct of the Indian schools under the present able management."

If there should be the least doubt about the re-appointment of Dr. Hailmann, Secretary Bliss could render a valuable service to the board of education of his home city by promptly informing them of it. There is at present a vacancy in the board of superintendents, caused by the resignation of Dr. Poland, and Dr. Hailmann would be just the man to fill it. The wonderful results of his work as superintendent at La Porte, Ind., and his remarkable success in the field of Indian education are matters well known to most of the school commissioners here, and they would be glad to consider him a candidate for an assistant superintendency.

The Educational Exhibit Association.

A year ago THE SCHOOL JOURNAL announced the formation of an association composed of leading publishing firms, with the object of conducting exhibits in connection with the annual meetings of the National Educational Association. This association met recently and elected the following officers: President, Orlando Leach, of Leach, Shewell & Sanborn; executive committee, J. Arthur Greene, of the American Book Co.; W. E. Pulsifer, of D. C. Heath & Co.; and W. J. Button, of the Werner School Book Co.; secretary and treasurer, Edward L. Kellogg.

The broad purpose of the association is to organize a comprehensive exhibit of school material of all kinds from all firms who do business with the schools of the United States, and to help increase the interest of teachers and school officers in the annual meeting of the National Educational Association.

Any publisher or manufacturer of school material is eligible to membership.

The following firms are charter members of the association:

American Book Co.—D. Appleton & Co.—Franklin Publishing Co.—Ginn & Co.—D. C. Heath & Co.—Harper & Brothers.—Houghton, Mifflin & Co.—E. L. Kellogg & Co.—Leach, Shewell & Sanborn.—University Publishing Co.—Maynard, Merrill & Co.—Silver, Burdett & Co.

Applications for membership are invited from all publishers and manufacturers of school material, in order to extend the organization and to secure a large, attractive, and representative exhibit for the meeting of the National Educational Association at Milwaukee in July.

Our Prize Offer.

THE JOURNAL again calls attention to its prize offer of an electric lantern, known as the Normal School Lantern (made by J. B. Colt & Co., New York city, and valued at \$100), for the most practical article on "The Use of the Stereopticon in Teaching." This lantern is furnished with an automatic electric lamp, carbons, condensers, etc. The manuscript should be sent to the editor of THE SCHOOL JOURNAL, 61 East 9th street, New York, on or before August 1, 1897. No article must contain over 2,000 words. The best one will receive the prize, and all others that are printed in these pages will be paid for at regular contributors' rates.

Editorial Correspondence.

Florida Schools.

A very important meeting of the county superintendents was held Feb. 13 and 14 at Live Oak. State Supt. Sheats presented a program, but invited discussion. School revenues came up first; it was decided that the county school boards should levy the tax. Then the question arose, How shall we be enabled to pay the teachers each month? All felt this a necessity.

In the evening Prof. L. W. Buchholz, superintendent of Hillsborough county, delivered an able address on the Value of Education to the State. The next day the question of uniformity in books in the entire state was discussed and negatived. The question of a course of study for the entire state found numerous advocates.

In the evening Prof. Geo. P. Glenn, of Jacksonville, gave an able address on the need of trained teachers to accomplish the results aimed at by the schools.

Next the question of compulsory education was discussed and advocated by nearly all. Supt. Glenn dissented and gave strong reasons. Then county high schools were discussed.

The material of which this convention is composed is far superior to that employed ten and less years ago. The superintendents are chosen by the people and in most cases do good credit to the voters. The leading spirits are Messrs. Buchholz and Glenn, who came respectively from Tampa and Jacksonville. Both of these men possess not only a high order of intellect, but are trained in the art of education; both sought Florida for health reasons. The salaries they are paid never would have attracted them here.

State Supt. Sheats is rising in popularity, and it may be truthfully said that he gives valuable experience and good brains to the work of elevating the school, in large measure. He has a task of no small magnitude before him, for there are numerous obstacles in the way. For example, the people of a section cannot issue school bonds and build school-houses. A general tax is levied, and from this the school board may draw money, thus diminishing the teachers' salaries.

The exercises for Washington's birthday in the Tampa grammar school occupied the afternoon of the Friday preceding the holiday. As Arbor day had occupied extra attention early in the month, only an informal program was carried out in each room. Miss Johnston's pupils repeated patriotic quotations, recited short poems, read compositions, and sung, each member following smoothly upon the other without comment or introduction from the teacher. Prof. Williams' room showed a pretty combination in its decorations, the palmetto leaves and the national flag.

In the primary department the following program was carried out, the visitors enjoying the efforts of the little ones as much as the participants: Songs, Raise the Banner, and My Country, I Love Thee; recitations, Six Little Boys, Six Little Girls are We, Our Flag; song, Red, White and Blue; recitations, How Did Washington Look? Who was Washington?; song, Glory, Hallelujah; recitations, A Promise, A Puzzling Question, A Little Maid's Reply, February Acrostic, John Henry Jones; song, Am I a True American? recitation, My Country's Flag; song, Sing a Song of Washington; recitations, February 22nd, Planting the Nation, Crowning the Hero; songs, Slumber Songs, Three Cheers.

A. M. K.

Topics of the Times.

The war cloud in the East has not grown any less. Premier Delyannis, of Greece, has denounced the bombardment of the Christians in Crete, by the vessels of the powers as savage, impious, and unjust. In the meantime, the tide of war in Crete is unchecked, in spite of all the warnings of the powers. Insurgents have captured a fort and taken 3,700 Mussulman prisoners. Selino has been bombarded, and is likely to fall. On the continent the war preparations are going forward, and there is no telling what the end will be. Austria and Russia are mobilizing their armies; Turkish troops at Janina, Albania, have been ordered to advance to the frontier of Greece. The latter feels her weakness, but knows that she has with her the sentiment of the civilized world.

In an interview with a newspaper correspondent, Gen. Gomez, the commander of the Cuban forces, said he did not expect aid from the United States, but justice. He asserts that Cuba has a regularly organized government, and thinks it is not right for the United States to use its navy to help overthrow it. The civil system of Cuba, he says, has its schools, mail system, factories, newspapers, and general departments.

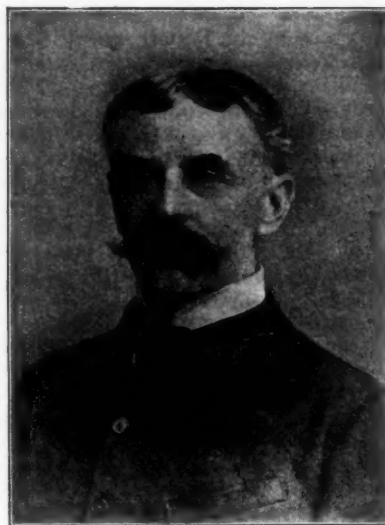
The Japanese government has decided to adopt the gold money standard. The mint ratio between gold and silver has been fixed at $32\frac{1}{3}$ to 1. The silver yen, or dollar, will be withdrawn gradually from circulation, and the smallest gold piece will be of the value of five yen. The new standard will go into operation next October.

It is said the Russian government has under consideration the re-organization of the scale of punishments by exile to Siberia. According to existing rules, state and criminal offenders are liable to exile, for a longer or shorter period, to the nearer or further parts of Siberia, as may be directed by the particular article of the law code under which they are convicted. A great many of these, if courageous enough, and sufficiently provided with the necessary means of support for so long a journey, have rarely found much difficulty in secretly returning to Europe or getting abroad. The Trans-Siberian railway will remove many of the chief obstacles to escape; and the needful passports are more easily procurable than might be supposed. Rumor points to the island of Saghalien as the probable future destination of Russian exiles. At present this island is used only for criminals of a very low type, guarded by military officers, who are not much better than their charges.

In the taking of the census of Russia, which has just been completed, 135,000 enumerators were employed. When it is stated that the census papers have been issued, where necessary, with interliner translations into no less than forty-two different tongues, and that the work includes a census of the nomad tribes of the Steppes, some conception can be formed of what has been done.

The Nicaraguan canal bill is one of the measures that failed of passage at the late session of Congress. The reason for its failure is that a satisfactory treaty does not exist at present. Americans, generally, would like to have the United States control the canal. If Secretary Sherman can secure the negotiation of a new treaty, giving the country a better status in the canal matter, nothing will be lost, and, eventually, a good deal gained by the delay.

One of the most noted soldiers of the civil war, Gen. Alfred Pleasanton, lately died in Washington, where he was living, having been placed on the retired list some years ago. Gen. Pleasanton was born in 1824, and was graduated from West Point in 1844. Before the opening of the great civil conflict he won honors in Mexico, and as an Indian fighter. He was made brigadier general for his services in the peninsula campaign; with his cavalry he saved the eleventh corps from destruction at Chancellorsville. He took a prominent part in the Gettysburg campaign, and later performed some brilliant cavalry service under Gen. Rosecrans in Missouri.



FRANK THOMPSON, the new president of the Pennsylvania Railroad.

A train running from Chicago to Denver recently broke the world's long-distance railroad record. It made the 1,026 miles in 18 hours, 52 minutes, beating the railroad officials' own lowest estimate by two hours, and making an average speed for the entire run of nearly a mile a minute, including the mountain climb.

The region around Salt Lake City has been violently shaken by earthquakes during the past few months. The explanation of this is said to be a volcano in the big arm of the lake, on the west side of the large range of mountains, visible from Brigham City. It is about a mile and a quarter from shore, and has been in action for several days. The cloud rises in the air so high that it can be seen far away, and the water in the vicinity boils, and surges, and foams.

From the opening of the Cuban rebellion, over two years ago, on February 25, Julio Sanguily, a naturalized American citizen, was confined in a Spanish prison in Cuba. On the latter date he was released. Ruiz, another American citizen, was lately murdered (so it is claimed) in a Spanish dungeon. Many more Americans are in prison on the island, some on charges that would not stand for an instant if they were fairly tried. Surely, our government has been very patient with Spain.

Two British officers have lately completed an eighteen months' journey from India through Tibet and northwest China to Peking. They suffered great hardships, and most of their attendants either died or deserted them. The Mongol tribes were kind and hospitable. They discovered one of the sources of the Yangtze river.

A National Song Written Under Hot Fire.

"The Star Spangled Banner" was written by Francis Scott Key at the time of the attack on Fort McHenry, made by Admiral Cockburn on September 13, 1814. Key was held as a prisoner in a little boat moored to the commander's vessel. Through the whole day and night, exposed to the fire from the shore, Key watched the flag on the fort, and, at break of day on the 14th, saw it was still waving—"our flag was still there." Then, taking an old letter from his pocket, he rested it on a barrel-head, and, at fever heat, wrote the poem, which he called "The Defense of Fort McHenry."—William George Jordan in February *Ladies' Home Journal*.

Hood's Sarsaparilla is known to be an honest medicine, and it actually cures when all others fail. Take it now.

THE SCHOOL JOURNAL.

Established 1870. Published weekly at \$2.50 per year, is a journal of education for school boards, superintendents, principals, and all teachers who desire to have a complete account of all the great movements in education.

We publish THE TEACHERS' INSTITUTE, monthly, \$1.00 per year THE PRIMARY SCHOOL, \$1.00 a year EDUCATIONAL FOUNDATIONS, \$1.00; REYA; and OUR TIMES (Current Events), monthly 30 cents a year E. L. KELLOGG & CO., 61 East Ninth street, New York.

San Francisco Lacks Funds.

San Francisco.—Unless the board of supervisors grants a relief appropriation the public schools will, in all probability, be closed in May. The new school board finds itself handicapped with a deficit of over \$90,000, and it seems that the only way out of the difficulty is to deprive the teachers of a month's salary. This may be done by closing the schools for a month, or by making an agreement with the teachers to work for a month, and take their chances of being paid at the beginning of the next fiscal year from a special proportion.

A special committee of the board decided that a saving could be made by placing the unassigned teachers on the substitute list.

A Cut in Teachers' Salaries.

Atlanta, Ga.—The reduction made by the finance committee in the public school appropriation for 1897 has been the subject of much comment. Macon and Augusta, and other smaller cities, pay their teachers the same salaries as Atlanta, and it was feared that in cutting the wages of teachers, Atlanta would lower the standard of teaching. There were many strong protests from President Thompson, of the board of education, and others, but despite all arguments, at a very stormy meeting of the board a resolution was passed to reduce the salaries of all teachers and school employees, except the janitors, nine per cent., the cut to date from January 1. There was much discussion as to whether the board had a right to reduce the salaries before June, 1897, on the ground that the contract had been made with the teachers last June for one year at the present salary.

Finding that his protests received no attention, President Thompson resigned his office, and said he would no longer serve on the board. The resignation, however, was not accepted.

Boston Teachers' Historic Festival.

Boston.—The Teachers' Mutual Benefit Association will hold a historic festival in Music Hall, beginning April 19, and continuing eight days. Although the permanent fund amounts to \$77,000 it is not sufficient to pay off the annuities of sixty or more retired teachers who must be cared for, and the proceeds of the festival are expected to augment the fund. The committee in charge has sent out a letter to the Colonial Dames, The Daughters of the Revolution, Daughters of the American Revolution, Society of Colonial Wars, Mayflower Descendants, etc., asking their co-operation in the work. The association hopes to present such a "succession of the scenes and events in the history of the city, as shall be of intense interest to all citizens."

College Men in the Nation's Service.

President Thwing, of Western Reserve university, Cleveland, says:

"Not far from one half of the members of the national senate and house have received a liberal education. Of the thirty-two speakers, eighteen have had the advantage of a college training. In the executive department of the national government, of twenty-five presidents, fifteen have been liberally educated, and one-half of the vice-presidents have had the same advantage. The larger proportion of the members of the cabinet have also been liberally educated. Of the secretaries of state, Harvard helped to train John Quincy Adams and Edward Everett; Yale, Calhoun, Clayton, and Evarts; Dartmouth, Webster; Columbia, Jay, Livingston, and Fisk; Union, Seward; Brown, Massey and Olney; William and Mary, Jefferson, Washington, Blaine; and Princeton, Madison. Pinckney was educated at Oxford. It should not be forgotten, too, that in the solution of the critical questions which Seward was obliged to make, he especially relied upon Dr. T. D. Woolsey, the president of Yale college, upon Francis Wharton, a graduate of Yale in the class of 1839, and upon William Beach Lawrence, a graduate of Columbia in 1813. One cannot forget, too, that in the office of the secretaryship of the treasury, the college graduate has rendered conspicuous service. Robert Morris, who managed the financial affairs of the country during the Revolution, declined the honor of a continuance of his place and pointed out Hamilton as the man best qualified to arrange the national finances. Hamilton was a graduate of Columbia. Chase, also called to the service of the nation in a crisis as great as that in which Hamilton served, was a graduate of Dartmouth; and Fessenden was a graduate of Bowdoin, in the class of 1823. It in this relation it is not unfitting to say that the man who, in 1865, was named chairman of the committee upon national revenues and taxation, was a graduate of Williams college, in the class of 1847—David A. Wells. Of members of the other departments of the cabinet somewhat more than one-half have received a liberal education."

Fire in a Boston School.

Boston.—A fire recently broke out in the Everett school, causing a stampede of the pupils. Several pupils were crushed, though it is thought that none is fatally injured. Nine children were taken to the city hospital. The fire is supposed to

have started from a lighted match, which was thrown into a waste basket in one of the dressing rooms.

The Teacher's Personality.

Philadelphia.—Mr. Graham Wallas, a member of the London school board, and a well-known university extension lecturer, visited the Normal school recently, and addressed the students.

He explained that the London teachers, in the poorer districts, have to meet conditions which we are not required to face. While the aim of the school board and teachers is to give children the information which will fit them for their ordinary life, it was felt that the boy and girl must have not only knowledge, but motive behind them.

"The pupils learn, not only from the books which the teacher uses, but the personality of the teacher. Look back for a moment on your own lives as children at school. What is it that comes back to you as the strong motive which you then felt? I do not suppose it is the arithmetic lesson or the science lesson; but it is something which you learned, perhaps, in a second of time, when you saw for one moment that your teacher was deeply feeling something which he or she was saying. Therefore, if the teacher is really to influence the motives and feelings of the children she must herself have deeply felt that which she is teaching. When she is teaching science she must have felt something herself of the doubt, the difficulty, the hesitation and pain by which alone new scientific truth is discovered or the old scientific truth expanded. If she is teaching literature, the literature must be real to her. In her soul there must have been some of the struggles, some of the joy which have made the great teacher or great literature of all ages. If a nation is to face the great intellectual problem of our time, the teachers of that nation must form, in a sense, that which the teachers of no other nation have formed—an intellectual class. There was a time in the middle ages, when the only class who cared for the mere intellectual and moral movements of that time were the small class of the clergy, and monks, and nuns. They alone lived among books and cared for higher things. But now, besides that class and the leisure class, who have nothing to do but study, we have those who have to work for a livelihood, who work for themselves, and who form the intellectual class of our time. It is from that class that the great literature of our time has sprung, as it sprung up in England, as it will spring up from those who are trained as teachers in the ordinary public schools. Though many of us will not become great writers, yet we will be able to appreciate that which others write. The future of the schools in this city depends upon the preparation which the students secure in this institution, and the success of the teacher depends largely upon the personality of the individual."

"The Laborer is Worthy of His Hire."

The Philadelphia Press, in an article headed "A Just Increase of Salary," calls attention to the proposition before Congress to increase the salary of Dr. W. T. Harris to \$5,000, and compares the present salary paid the commissioner of education with that received by the superintendents of schools in our large cities.

The superintendent of the schools of New York receives \$7,500; of Chicago, \$7,000; of Brooklyn, \$6,000; of Washington, \$5,500; of Cleveland and Philadelphia, \$5,000; of Cincinnati and St. Paul, \$4,500; of Boston, \$4,200; and of Minneapolis, \$4,000. "In almost any city of any importance these professors make more money teaching a few hundred pupils a year than does Dr. Harris, superintending the educational interests of the United States."

A Great Drawing Teachers' Meeting.

The Western Drawing Teachers' Association will hold its fourth annual meeting in St. Louis, Mo., April 21-23. There will be one of the largest exhibits of drawing ever seen in this country. About sixty Western cities will send work. The people of St. Louis take great interest in the coming event, and will exert themselves to make the guests of their city comfortable and happy during their stay. The program will be highly interesting. Many of the leading educators of the country have been invited to address the association.

A Nut for Child Students.

A German child, 11 years old, with little knowledge of English, and unable to read German, read "under the golden sun" as follows: "over the silver moon." She could not possibly have heard the expression in English, and there is a very little probability that she has heard it in German. Who can explain? C. H. R.

Colored Children Excluded from White Schools.

Jamaica, N. Y.—Judgment has been filed, dismissing the complaints in the action brought by Maria Green and others against the school board to recover in each case a penalty of \$500 for refusing to admit the colored children into the white schools. The board is awarded costs, amounting to \$40, in each case, in addition to the dismissal of the complaints.

School Board Experiences.

(From a Commissioner's Note-Book.)

When planning for a new school an architect should be consulted who has made a special study of school buildings. Towers and other incongruous things which serve no rational purpose and betray only crude ideas of beauty must be ruled out. The exterior as well as the interior should satisfy and contribute to the refinement of the æsthetic taste of children. Not gaudiness, but simple and dignified comeliness should characterize the architecture of the school.

It is refreshing to hear the president of a school board talk with pride of the buildings and equipment provided for the elementary schools. Usually the only building really worth mentioning as a monument of the educational interest of a town is the high school. Some of the best elementary schools in the country are housed in poor buildings with no adequate provisions for hygienic heating, lighting, and ventilating (in Indianapolis, for instance). There ought to be no ground for the oft-repeated criticism that the high schools are being advanced at the expense of the elementary schools. The health, the comfort, and the happiness of the children in the primary school ought to be looked after first. The older children whose bodies are stronger and who are less dependent upon environment for their cheerfulness can sooner get along without a few of the many good things that every really good modern school ought to be provided with, than the little tots who are just entering upon the serious work of life.

Economy must, of course, be insisted upon in the use of fuel, but that ought not to mean that the fires are to be put out as soon as school closes. The most rational way is to keep up a slight fire all the time during the winter months in city schools as well as in country schools. When the children arrive in the morning the rooms ought to be comfortably warm, and the furniture also, even the desks nearest to the windows.

No school should be without a lightning-rod and a good fire-escape. Both must be thoroughly examined at least once a year.

New York City Notes.

The committee on high schools reported this week in favor of establishing a girls' high school in grammar school No. 47, at No. 36 East 12th street; a boys' high school in grammar school No. 35, at No. 60 West 13th street, and a mixed high school in grammar school No. 62, 158th street and Third avenue, the schools to open in September.

To give time to put the buildings in proper condition it was decided to disband schools Nos. 47 and 35 on June 1, the pupils of these schools to be distributed among other schools until the end of the present term.

\$267,955 have been appropriated for a new school building in the block bounded by East Broadway, Henry, Gouverneur, and Scammell streets.

The over-crowded grammar schools in different parts of the city have been partially relieved by the opening of the buildings at No. 182 and 184 Cherry street, Seventy-first street and Boulevard, Park avenue and Ninety-sixth street. Fully 1,400 children were accommodated in the new grammar school at 102nd street and First avenue.

Teachers on the eligible list, having no fixed assignment, are placed in the new schools.

The board of education's wood contract for this year amounts to \$7,300.

Every snow storm costs the city of New York \$100,000, approximately, for labor and carting.

Women Teachers' Petition.

A meeting of women teachers representing all parts of greater New York, was held on Saturday afternoon at the college of the city of New York. The purpose of the meeting was to secure an advance of salaries for women under the new charter. The following petition to the legislature was adopted: "We, the undersigned principals and teachers in the public schools of the Greater New York, do respectfully request your honorable body to amend chapter XVIII., section 1,091, of the new charter, by placing at the end of the first paragraph the words:

"But no teacher shall be paid a less sum than \$600 per year, and where men and women teachers are performing similar duties in similar grades they shall receive equal compensation."

The following schedule of salaries paid to men and women has been made out:

PRINCIPALS.

	MEN, Boys' Gram. Dpts.	WOMEN, Girls' Gram. Dpts.	WOMEN, Mixed Prim. Dpts.
Highest salary.....	\$3,000	\$1,700	\$1,700
Lowest salary.....	2,250	1,200	1,000

TEACHERS.

	MEN, Boys' Gram. Dpts.	WOMEN, Girls' Gram. Dpts.	WOMEN, Mixed Prim. Dpts.
First assistant.....	\$2,016	\$1,056	\$900
Second assistant.....	1,728	960	834
Third assistant.....	1,656	873	774
Fourth assistant.....	1,476	795	720
Fifth assistant.....	1,332	726	672
Lowest.....	1,080	573	504

The examinations for men and women teachers are the same.

When the City Pays the Piper.

The *Sun* writes that recently the city of New York required for the use of the board of education a building on Seventeenth street, between Eighth and Ninth avenues, and after long and tedious negotiations a price was fixed for it—\$17,500. In ordinary real estate transactions the agent who negotiated the sale would have received from the seller one per cent. of the purchase price, or \$175. Instead of this, however, the expenses of the proceeding in fees and commissions amounted to \$2,109.90, bringing up the total cost to the city of this one lot to \$19,609.90. The case is not exceptional, but gives a fair illustration of the extent to which fees are charged—when the city is paying them.

Lunches for School Children.

The Rev. Dr. Rainsford, in his investigations among the poor, finds that many children go to school without breakfast, and with no prospect of dinner. In many cases the teachers know this; and feed them, sometimes sharing their lunches with them. Dr. Rainsford thinks that some systematic plan should be started to relieve this distress. He favors the plan of blank orders to furnish the needy children with hot lunches at school.

Notes of General Interest.

A bill, appropriating \$18,000 to continue free instruction in natural history, geography, and kindred subjects, in normal schools throughout the state, and the New York city training schools for teachers, has been passed in the assembly.

The Live Oak preparatory school, Baton Rouge, La., is about to adopt modern text books in reading, spelling, and busy work in primary and secondary grades.

The teachers' committee of the Newark, N. J., board of education will hold a special meeting on March 19, to consider the rules for the examination and promotion of teachers, prepared by Supt. Gilbert.

The Nixon free text-book bill, now before the New York state legislature, aims at state uniformity. That ought to be sufficient to kill it. From state uniformity to publication of school books by the state is only a short step. What a great opportunity for a fat "strike" the latter would be to the hungry politicians!

Athol, Mass.—Supt. W. Scott Ward, of Baldwinville, has accepted the superintendency of the Athol schools, and will begin his duties April 1.

The Martha's Vineyard Summer institute has grown to gigantic proportions. It had last year between seven and eight hundred members, comprising teachers from forty states and countries. The management are making unusual efforts for a successful season for the coming summer. Several new departments have been added, and a strong faculty have been engaged. The pedagogy, psychology, educational literature, and child study, will be in charge of Dr. Emerson E. White, of Ohio, Dr. Richard G. Boone, of Michigan, and Will S. Monroe, of Massachusetts. Circulars giving full information may be obtained free, by addressing the president, W. A. Mowry, Hyde Park, Mass.

Meetings of Educational Associations.

March 6.—Harvard Teachers' Association at Sever Hall, Harvard university. The speakers will be Prof. Edwin A. Hall, Harvard university; Prin. Daniel S. Sanford, high school, Brookline; Hon. Frank A. Hill, secretary, state board of education; Prin. Charles S. Moore, high school, New Bedford; Henry T. Bailey, agent of the state board of education; Col. T. W. Higginson, Cambridge; and Prof. Albert Bushnell Hart, of Harvard university.

April 1, 2, 3.—Northern Indiana Teachers' Association at Elkhart. W. R. Snyder, Muncie, president.

April 2, 3.—Michigan Schoolmaster's Club at Ann Arbor, Mich.

April 3.—Southwestern Iowa Teachers' Association at Council Bluffs.

April 14, 15.—Alabama State Teachers' Association at Birmingham.

April 19-21.—Meeting of International Kindergarten Union at St. Louis, Mo.

April 21-23.—Western Drawing Teachers' Association, at St. Louis, Mo. President, Miss Bonnie Snow, Minneapolis, Minn. Secretary, Miss Frances Ransom, Saginaw, Mich.

July 1, 2, 3.—New York State Teachers' Association at Rochester. Charles E. White, Syracuse, president; S. F. Herron, Elizabethtown, secretary.

July 6, 7, 8.—New York State Music Teachers' Association at Binghamton. Dr. Gerrit Smith, 573 Madison avenue, New York, president; Walter J. Hall, Carnegie hall, New York, secretary and treasurer.

July 6-9, 1897.—National Educational Association meets at Milwaukee, Wis.

July 9, 12.—American Institute of Instruction at Montreal.

School Equipment.

Under this head are given practical suggestions concerning aids to teaching and arrangement of school libraries, and descriptions of new material for schools and colleges. It is to be understood that all notes of school supplies are inserted for purposes of information only, and no paid advertisements are admitted. School boards, superintendents, and teachers will find many valuable notes from the educational supply market, which will help them to keep up with the advances made in this important field.

Correspondence is invited. Address letters to *Editor of THE SCHOOL JOURNAL*, 61 East 9th Street, New York City.

How New York Schools are Supplied.

The supply list of the New York city public schools is a voluminous document of 67 pages. It contains the names of over 500 separate text-books, maps, and charts that have been officially indorsed by the board of education, with names of publishers, and the price at which each article is supplied to the schools. There are, besides, on the list many hundreds of articles under the heads of stationery blanks, supplies for object teaching, manual training, sewing, kindergarten, kitchen, and for janitors. The supply list is made up once every year, and is printed under the direction of the clerk of the board of education. A separate list of "books for school libraries" is also issued, containing names of 1,414 different publications.

Every wide-awake publisher is, of course, anxious to get his publications on the New York city school supply list, for it may mean to him the sale of many thousands of copies of his text-books in the course of a single year. Here is the method of getting books on the list:

Early in the year the clerk of the board of education makes up, under direction of the committee on supplies of the same board, a list of all articles, books, stationery, fuel, etc., required by the schools for the ensuing year. The committee on supplies then advertises for two weeks in the "City Record" for proposals to furnish any one or more of the articles so required. The advertisement states the time when the articles are wanted, and informs publishers that blank proposals and lists of articles to be supplied may be obtained at the office of the clerk. It also states when these proposals will be received. Proposals to furnish supplies to the public schools of New York city must be accompanied by the names and signatures of responsible sureties, and must state the lowest price at which each article called for, of the quality specified in the advertisement of the committee on supplies, and corresponding with samples deposited with the clerk of the board, will be supplied. No person is allowed more than one bid on an article. At the time appointed in the advertisement the committee on supplies meets, opens the bids, and awards the contracts. No contract to furnish supplies will be awarded except to responsible parties giving security satisfactory to the committee. The action of the committee is then reviewed by the full board of education.

Two committees of the board of education have to do with selecting, procuring, and distributing school supplies—the committee on supplies and the committee on instruction. The first committee procures and distributes supplies, while the second named is charged with all matters pertaining to principals, teachers, course of study, selection of text-books, methods of instruction, etc. The committee on instruction consults with a similar committee from the board of school superintendents, and their joint opinion is supposed to determine the selection of new books and the dropping of old ones from the supply list.

The committee on supplies of the board of education makes its final report to the full board at the first meeting in September. This report is referred immediately to the committee on instruction of the board, whose members, after consulting as before mentioned with the committee of superintendents, report back to the full board in October, when the completed supply list is made up.

The present members of the committee on supplies of the board of education are Messrs. Kelly, Montant, Little, Peaslee, and Andrews; of the committee on instruction, Messrs. Prentiss, Rogers, Taft, Agar, Greenough. The committee on instruction of the board of assistant school superintendents are Messrs. Jameson, Elgin, Farrell, and Davis.

C. De F. HOXIE.

The X-Rays in the School-Room.

It only takes a short time at most nowadays for a valuable discovery to become known all over the civilized world, but the record was broken by the discovery of Prof. Roentgen. The wonderful results from the x-rays made it the subject not only of scientific, but of popular interest, and it was not many weeks after its announcement before practical applications were made wherever the apparatus could be obtained. The makers of apparatus quickly turned their attention to the new requirements of the science. Much of the apparatus is specially adapted to the use of schools, especially that of the L. E. Knott Apparatus Company, 14 Ashburton place, Boston. Attention is especially called to their High Frequency Coil.

Being attracted by the accounts of the results obtained by Nikola Tesla, their attention was naturally turned in the same direction. Knowing the importance and difficulty of the problem they had set out to solve, they at once placed the matter in the hands of one of the most efficient corps of electrical experts in this country. After weeks of careful experimenting they were able to obtain the results which many of the more progressive experimentors have been demanding. The formula for the instrument thus devised they believe is the best possible, namely, such as to produce high frequency and high voltage with low amparage. With a consumption of $4\frac{1}{2}$ amperes at 52 volts, they are able to obtain a voltage of about 2,500,000, with a frequency of approximately 400,000. The effects of this discharge on the Crookes tube can readily be imagined.

They are now making the instrument in two designs, one to be operated from the direct, and the other the alternating, incandescent system. The first can operate on any voltage from 50 to 110; the second, on either a 52 or 104 volt circuit.

The Fluoroscope.

The development of "X" Ray work during the past year has naturally called for a great many pieces of apparatus, until now practically unknown to the scientific world. Among these stands pre-eminently the fluoroscope, which occupies the same position in regard to this work, that the ground-glass plate does in photography. Both are indispensable in the proper carrying on of investigation.

At first sight the fluoroscope looks very much like the well-known stereoscope. It has a very similar form, but in place of the end being open to receive the photograph, as in the stereoscope, it is, in the fluoroscope, closed by means of a cardboard screen, the outer surface of which is black, and the inner surface coated with calcium tungstate. The end at which the eyes are applied is fringed with soft fur, and fits snugly around the eyes, thus making a light proof interior.



The "X" rays have a fluorescing effect upon the calcium tungstate, so that when any part of the human trunk or limbs is placed between a properly excited Crookes tube and the fluoroscope, it is possible, by looking into the latter, to see the bones very clearly, and also to locate pieces of lead, needles, and other foreign substances. Visual examinations can therefore be immediately made with the fluoroscope, without waiting for the slower but more permanent record of the scia-graph.

The illustration, for which we are indebted to the W. A. Olmsted Scientific Company, Chicago, will give an idea of its use. Fluoroscopes are made with various sized screens from 4 x 5" up to 10 x 12", and larger.

Physical Apparatus for Secondary Schools.

A handsomely printed and illustrated catalogue of seventy-two pages contains a description of the physical apparatus of the Crowell Apparatus Co., Indianapolis, Ind. They claim this to be the most unique, compact, and comprehensive set of apparatus ever placed upon the market. It makes possible a laboratory within reach of the secondary school, suitable for both qualitative and quantitative work in due proportion and extent.

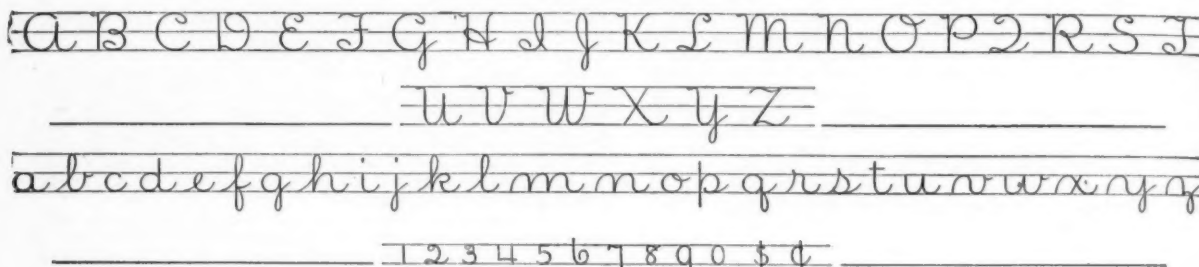
The central idea consists in arranging in easily accessible places a sufficient number of pieces so designed that they can be used separately, or combined into a large number of devices or machines for illustrative work. Such a scheme renders it possible to manufacture of the best materials and workmanship a very wide range of apparatus at a fraction of the cost of the same apparatus, made up of separate machines in the usual form. Furthermore, the pupil learns the working of a machine by putting it together. The range of work practicable with the set includes such well-known courses as that recommended by the "Committee of Ten," "The Harvard Experiments," etc., and leaves a good margin to the option of the teacher to suit local needs.

A New Series of Writing Books.

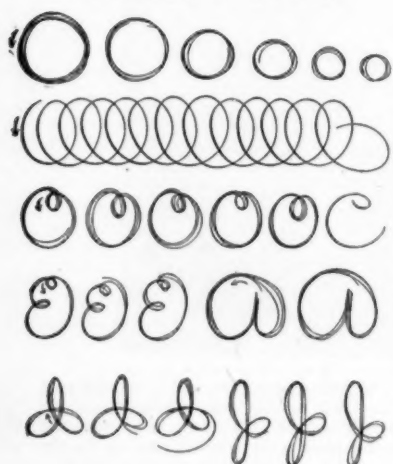
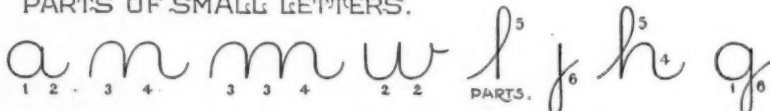
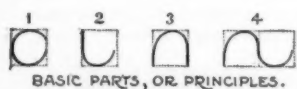
For over three years Sheldon & Co. have been at work preparing a new series of *Vertical Copy-Books*, and also a series of *Standard Copy-Books*, having employed the most expert talent in the preparation of both series; and have expended merely in the preparation of these books (that is, before one copy was printed) over \$15,000. Some of the Vertical Copy Books were issued a few months ago. Such changes as seemed desirable have been made, and they now appear in a new dress. The Standard Series are now for the first time presented to the public. The special advantage of Sheldon's Vertical Copy-Books, it is claimed, is that from the very start they teach vertical writing systematically. Every movement exercise is thoroughly devel-

oped, and scholars are thus taught to write this beautiful round hand with facility and rapidity. This series is accompanied by two charts, to hang up in the school-room and also, a Teacher's Manual, which removes every difficulty in the way of teaching this system. Sheldon's Standard Series are remarkable for their simplicity and beauty. The vertical system has at last awakened a desire for a more simple style of writing in the slant series, with less elaborate flourishing. The free-hand movement which recently became so popular, has been thoroughly incorporated in this series, and business forms are also well worked out. The accompanying cuts show the two styles of "Standard" penmanship.

STANDARD LETTERS.



PARTS OF SMALL LETTERS.



MOVEMENT DRILLS.

To acquire a rapid and fluent handling of the pen in writing, something beyond the regular practice given in the headlines is necessary. The writing instrument, the hand and forearm, must be trained to the writing movements by appropriate exercises. The letters themselves are but photographs of various movements of the hand and arm, assisted by the fingers; hence, the more attention given to acquiring correct movements by practice on the drills the better for the pupils. Makers of copy-books of Vertical Script have ignored *movement practice*, leaving the field entirely to the slant systems. There is no excuse for this. Vertical script demands the practice of *movement* quite as much as, if not more than, slanting script. These books are unique in this respect, as well as in the clear, round style of the writing shown throughout the various numbers.



Business
Commercial



Practice
Papers.

"Whatever avocation a young man or woman may choose as a calling or life-work, there can be no question but that the first step is to obtain a practical business education. Such an education will be always available in any occupation. It is a resource that will come to your aid every day of your life. By all means secure it."

Henry Ward Beecher.

24

The DUCKS.

can swim ducks
can swim ducks
them fast
them fast
by the water
by the water
Here are Dick and Bessie.
Here are Dick and Bessie.
They like to see the ducks.
They like to see the ducks.
The ducks are in the water by the tree.
Can you not see them swim fast?
Come here, Bessie, and see how fast they go.
See the old black duck by the tree.
Can he not swim fast?

See Tom. He has some eggs in his hand. They are duck's eggs. Where did you get them, Tom? I got them in the nest by the water. Are they not big?

3

The Bird.

boy
boy's hat
bird
on the tree
See the bird on the tree.
The boy sees the bird.
The bird is a black bird.
See the boy's hat.
Is a cat on the tree?



New Vertical Script Reading Charts.

The teaching of reading and kindred subjects will be greatly assisted by the new Vertical Script Reading Charts of Potter & Putnam, New York. These are mounted on a stand, and with their beautiful print and script, and colored engravings, make ornamental, as well as useful objects in the school-room. On one page is the script; on another, script and print together. The teacher may pursue her instructions in pure script, or she may take the script and print forms together. The special features are: A vocabulary of 116 words, common to all print primers, an easy gradation of reading text, strong and handsome vertical script, full reading and development lessons in script, full reading and development lessons in script and print together, reading lessons in print, quality words developed with nouns and relation words in phrases, strong and effective illustrations, valuable aids in penmanship, etc. The publishers are confident that every live teacher will recognize the plan followed as thoroughly practical, strictly pedagogical, and highly effective.

A Cuban Primer.

The first school book ever printed in Cuba is a little yellow-covered primer of sixteen pages. The little book is printed by the only press in the province of Oriente, and the paper is coarse, and type poor. The author of the primer, who is superintendent of education in the province of Oriente, has attempted to have one book cover reading, geography, and arithmetic.

It might also be called a text-book in liberty. The first lesson in reading begins, "My papa is in the ranks of the army of the liberator. The war with Spain will make Cuba free. I love liberty."

"Cuba is a republic," so says this revolutionary primer, "ruled by a president and a Congress, elected by the people. The army of Cuba is commanded by Maximo Gomez."

Under geography the children are told that "Cuba is an island, and it has three sides. It is divided into four provinces." This is followed by the new sub-division of the island which President Cisneros and his cabinet have made in complete disregard of the old Spanish boundary lines.

There are more than fifty schools in this province, and yet not all the children who come can be accommodated. Schools are usually situated in the deserted residences of sugar planters. A corporal's guard is detailed for the protection of each school-house. Education is compulsory wherever accommodations can be provided for pupils.

Briefer Notes.

Hinds & Noble have taken the store adjoining their present quarters, and will now occupy, in addition to No. 4 Cooper Institute, he stores, Nos. 5, 13, and 14, thus securing not only commodious warerooms, but also ample light, as these stores run through from Fourth avenue to Third avenue, with two full window fronts on Fourth avenue and two on Third avenue. Their store has become well known as the headquarters of books of all publishers. We are glad to note this evidence of prosperity and expanding business.

D. C. Heath & Co. have opened permanent headquarters for the Pacific states at 327 Sansome street (with Cunningham, Curtiss & Welch), San Francisco. All correspondence from California, Oregon, Washington, Idaho, Nevada, and Arizona should be addressed to that office. Mr. Caspar W. Hodgson, who has represented the company in California for the past two years, will have charge of the new field. Teachers and school officers are invited to make the office their headquarters when in the city.

Mr. William J. Button, who for over twenty years has been the Chicago agent for Harper Brothers, has been elected general manager of the Werner School Book Company, with headquarters in Chicago, Ill. This company publishes a series of geography, history, arithmetic, English classics, high mathematics, physiology, penmanship, music, German, books on science, bookkeeping, and a large number of miscellaneous books. Mr. W. J. Sheridan, formerly of Pennsylvania, will have charge of the New York office. Mr. Geo. Cooper is the New York agent, and Mr. G. F. Cole, Brooklyn agent.

Maynard, Merrill, & Co., have removed from 43, 45, and 47 East Tenth street to more extensive quarters at 29, 31, and 33 East Nineteenth street, near Broadway.

British Publishers Organize.

The British Publishers' Association at its first general meeting recently held in London elected Mr. Charles Longman as president; Mr. John Murray, vice-president, and Mr. Frederick Macmillan, treasurer. A strong executive counsel was formed, and the association, presumably, will now get to work. The publishers say they have no quarrel with authors and there is no reason why the lion should not lie down with the lambs. A few months, probably, will settle the character of these relations. Over fifty publishing firms joined the association, and they include nearly all the big London and Edinburgh houses.

Educational Articles in March Magazines and Reviews.

MARCH ATLANTIC MONTHLY.

The Rational Study of the Classics. By Irving Babbitt.
My Sixty Days in Greece. II. By Prof. Basil L. Gildersleeve.

MARCH NORTH AMERICAN REVIEW.

Objections to a Children's Curfew. By Winifred Buck.

MARCH POPULAR SCIENCE MONTHLY.

Confessions of a Normal School Teacher. By M. H. Leonard.
Aid for the State Educational Machine.

PUBLISHERS AND M'FRS OF SCHOOL SUPPLIES

DIRECTORY.

AND SCHOOL EQUIPMENT.

We give below a most complete list of publishers of school books and firms who manufacture school supplies and equipment. This will be a great convenience in purchasing. Corrections are made each month. In writing for circulars, catalogues, or information you will get special attention by mentioning THE SCHOOL JOURNAL every time you write. The names in bold face type are regular or occasional advertisers in THE JOURNAL, and are specially commended as reliable firms.

School Book Publishers

American Book Co., N. Y., Cin., Chicago, Boston, Atlanta, Portland, Or.
Appleton & Co., D., N. Y. & Chi.
Armstrong & Son, A. C., New York
Baker & Taylor Co., " "
Barnes & Co., A. S., " "
Clive, W. B., " "
Harison, Wm. B., " "
Harper & Brothers, " "
Holt & Co., Henry, " "
Jenkins, W. H., " "
Longmans, Green & Co., " "
Lovell & Co., A., " "
Macmillan & Co., N. Y., and Chi.
Maynard Merrill & Co., New York
The Morse Co., " "
Mutual Book Company, " "
Nelson, Thos., & Sons, " "
Pitman & Sons, Isaac, " "
Potter & Putnam, " "
Scribner's Sons, Chas., " "
Sheldon & Co., " "
Smith Pub. Co., H. P., " "
University Publishing Co., " "
N. Y., Boston, and New Orleans
Van Nostrand, D., New York
Wiley & Sons, Jno., " "
Wood & Co., Wm., Boston
Allyn & Bacon, Boston
Boston School Supply Co., " "
Bradlee Whidden, " "
Educational Pub. Co., " "
Ginn & Co., Boston, N. Y., Chi.
Heath & Co., D. C., " "
Houghton, Mifflin & Co., " "
Lee & Shepard, Boston
Leach, Shewell & Sanborn, " "
Prang Edu. Co., Boston and N. Y.
Silver, Burdett & Co., " "
Bos., N. Y., Chi.
Thompson, Brown & Co., Boston
Ware, Wm. & Co., " "
Sadler & Co., W. B., Balto. Md.
Flanagan, A., " "
Powers, O. M., " "
Hand, McNally & Co., " "
Scott, Forman & Co., " "
Western Pub. House, " "
Werner School Book Co., " "
Chicago, N. Y., Boston, Phila.
Myers, R. L. & Co., Harrisburg, Pa.
Butler E. H. & Co., Philadelphia
Eldredge Bros., " "
Lippincott Co., J. B., " "
McKay, David, " "
Potter & Co., J. P. E., " "
Sower Co., Christopher, " "
Johnson, B. F. Co., Richmond, Va.
Williams & Rogers, " "
Rich., N. Y. & Chicago
Practical Text-Book Co., " "
Cleveland, O.
Irish, Frank V., Columbus, O.
C. A. Nichols & Co., " "
Springfield Mass.
Milton Bradley Co., " "
King, Richardson & Co., " "

Music Publishers.

Ditson, Oliver & Co., Boston, N. Y.
Novello, Ewer & Co., New York
John Church Co., " "
Cincinnati, New York, Chicago
S. W. Straub, Chicago

Book Covers

Harison, W. Bev., New York City
Van Evers, P. F., " "
Holden Book Cover Co., " "
Springfield, Mass.

School Furniture

Allen, Chas., Boston
Bobrick Sch. Furniture Co., " "
Chandler Adjustable Desk Co., " "
Perry, Geo. S., " "
Hudson School Furniture Co., " "
Athens, O.
Union School Furniture Co., " "
Battle Creek, Mich.
Kane & Co., Thos., Chicago
Rowles, E. W. A., " "
Sherwood & Co., " "
U. S. School Furniture Co., " "
Galpen, R. H., " "
Randolph McNutt, Buffalo, N. Y.
Buffalo Sch. Fur. Co., " "
Cleveland Sch. Fur. Co., Cleveland, O.
Favorite Desk Seat Co., " "
Ohio Lake Co., Dayton, O.
G. R. Seating Co., Grand Rapids, Mich.
Haney Sch. Fur. Co., " "
Man. Sch. Fur. Co., Manitowoc, Wis.
Marshall Sch. Fur. Co., Marshall, Mich.
Stafford, E. H. Co., Muskegon, Mich.
Globe Sch. Fur. Co., Northville, Mich.
Piqua Sch. Furniture Co., " "
Durant Desk Co., Racine, Wis.
Rich'd Sch. Fur. Co., Richmond, Ind.
Springfield Sch. Fur. Co., " "
Springfield, Ill.
N. J. Sch. Fur. Co., Trenton, N. J.
Bloomsburg Sch. Fur. Co., " "
Bloomsburg, Pa.

School Apparatus, Phys. and Chem.

Franklin Ed. Co., Boston
Hall, Thos. & Sons, " "
Hammett, J. L. Co., " "
Knott, L. E. App. Co., " "
Ritchie E. D. & Sons, " "
Thompson, A. T. & Co., " "
Ziegler Electric Co., " "
Central Sch. Supply Co., Chicago.
Manasse, L., " "
McIntosh Battery Co., Chicago
Olmsted Scientific Co., " "
Robbins A. L. Co., " "
Sargent & Co., E. H., " "
U. S. School Furniture Co., " "
Walmsley, Fuller & Co., " "
Lohmann Telescope Co., " "
Greenville, O.
Hough, Romeyn B., New York City
Recker, Christian, " "
Beseler, Charles " "
Elmer & Amend, " "
Colt & Co., J. B., " "
Keuffel & Esser, " "
McAlister & Co., " "
Richards & Co., " "
Gundlach Opt. Co., Rochester, N. Y.
Ward's Nat. Sci. Estab., " "
Eberbach Drug & Chem. Co., " "
Ann Arbor, Mich.
Billuck & Crenshaw, Phila.
Milligan, C. T., " "
Queen & Co., " "
Rau, Wm. H., " "
Williams, Brown & Earl, " "
Zentmayer, J., " "
Bausch & Lomb, Rochester, N. Y.
Henry Heil Chem. Co., " "
St. Louis, Mo.
Weston Elec. Inst. Co., " "
Newark, N. J.
Warner & Swasey, Cleveland, O.
Edgecomb, W. C., Mystic, Conn.

School Supplies

See also Blackboards, Book Covers, Charts, Flags, Maps, Globes, Bells, School Blanks, Kindergarten Material, etc.
Boston School Supply Co., Boston
Hammett Co., J. L., " "
Acme School Supply Co., Chicago
Barnes, C. M. Co., " "
Caxton Co., The " "
Central School Supply House, " "
Donahue & Hennebery " "
Educational Aid Association, " "
Flanagan, A., " "
Kane & Co. Thos., " "
Olmsted, W. L., " "
Rowles, E. W. A., " "
Standard School Fur. Co., " "
U. S. School Furniture Co., " "
Welch, W. M. & Co., " "
Century Sch. Supply Co., " "
Chicago, Ill.
Smith & White Mfg Co., " "
Holyoke, Mass.
Bell, W. L. & Co., Kansas City
Choate, W. F. Co., Albany, N. Y.
American Mfg. Co. Jamestown N. Y. " "
Twin City S. S. Co., Minneapolis, Minn.
Acme Sta. & Paper Co., N. Y. City
Central School Supply House, " "
Harison, W. Bev., " "
Olcott, J. M., " "
Peckham, Little & Co., " "
Potter & Putnam, " "
Schermerhorn & Co., " "
Wilson, J. B., Phila. Pa.
Mc Cies & Co., " "
Lippincott Co., J. B., " "
Greenwood School Supply Co., " "
Youngstown, O.
Sch. & Off. Sup. Co., Gd. Rapids, Mich.
Ed. Supply Co., Kingston, Jamaica.

Blackboards, Crayons, and Erasers.

Bell, J. E., Boston
Hammett Co., J. L., " "
Central Sch. Supply House, " "
Chicago.
U. S. School Furniture Co., " "
Bell, W. L. & Co., Kansas City
Consolidated Lehigh Slate Co., N. Y.
Crown Slate Co., " "
Hobbie, A. D., " "
Olcott, J. M., " "
Silicate Slate Co., " "
Franklin Mfg Co., Rochester, N. Y.
Slatington-Bangor Slate Co., " "
Slatington, Pa.
Hyatt Slate Co., Bethlehem, Pa.
Am. Soapstone Finish Co., " "
Chester Depot, Vt.
American Mfg. Co., Jamestown, N. Y.
U. S. Crayon Co., Toledo, O.
Acme Sch. Sup. Co., Chicago.
Standard Sch. Fur. Co., " "
Londergon, W. H. & Co., " "
American Slate & B. Co., Phila.
Lippincott Co., J. B., " "

Charts

Boston School Supply Co., Boston
Ginn & Co., " "
Hammett Co., J. L., " "
Silver, Burdett & Co., " "
Century School Supply Co., " "
Chicago.
Central Sch. Supply House, " "
Educational Aid Association, " "
The Caxton Co., " "
U. S. School Furniture Co., " "
Western Pub. House, " "
Bell, W. L. & Co., Kansas City
Franklin Publishing Co., N. Y. C.
Harison, W. Bev., " "
Kellogg & Co., E. L., " "
Mutual Book Co., " "
Potter & Putnam, " "
Potter & Co. John E., Philadelphia
Congdon, C. H., St. Paul, Minn.
Williams & Rogers, Rochester, N. Y.
King, Richardson & Co., " "
Springfield, Mass.

Dialogues and Recitations.

Baker W. H., Boston
Denison, T. S., Chicago
Flanagan, A., " "
March Bros., Lebanon, O.
Dick & Fitzgerald, New York City
Excelsior Publishing Co., " "
Kellogg & Co., E. L., " "
Ogilvie, J. S., " "
Russell, R. H. & Son, " "
Werner, Edgar S., " "
Garrett Co., P., Philadelphia
Penn Pub. Co., " "
John E. Potter & Co., " "

Dictionaries & Cyclopedias.

Appleton, D. & Co., New York City
Dodd, Mend & Co., " "
The Century Co., " "
Funk & Wagnalls, " "
Lippincott Co., J. B., Phila.
Merriam, G. & Co., Springfield, Mass.

Diplomas, Reward Cards, etc.

Goes Lithographic Co., Chicago.
Central Sch Supply House, " "
Rickett's, C. L., " "
Ames & Robinson, New York
Fouch, A. J. & Co., Warren, Pa.
Wilcox, John, Milford, N. Y.
H. H. Carter & Co., Boston

Duplicating Apparatus.

Lawton & Co., New York.
Dick, A. B. & Co., Chicago

Flags, Medals, Badges, etc.

Hammett Co., J. L., Boston
Robert Miller Co., " "
Oak Hall Co., " "
Carpenter & Co., Chicago
Central Sch. Supply House, " "
Channon, H. & Co., " "
U. S. School Furniture Co., " "
American Flag Co., Easton, Pa.
Joel, A. J., New York City
Consolidated Fireworks Co., " "
Thorp & Co., S. S., " "
Degrauw, Aymar & Co., " "
Ensign Mfg Co., " "
Whitehead & Hoag Co., Newark, N. J.
Frink, W. C., Elizabeth, N. J.

Gymnasium Apparatus

Spaulding, A. G. & Bros., New York
Narragansett, Mach. Co., " "
Providence, R. I.
Schumacher, Gym. Co., Akron, O.

Kindergarten Material

Hammett Co., J. L., Boston
Charles & Co., Thos., Chicago
Schermerhorn Co., J. W., N. Y.
Steiger Co., E., " "
Milton Bradley Co., " "
Springfield, Mass.

Manual Training Supplies.

Chandler & Barber, Boston
Hammacher, Schlemmer & Co., " "
New York.
Barnes, W. F. & John, Rockford, Ill.
Seneca Falls Mfg Co., " "
Seneca Falls, N. Y.
Morse Mach. Co., Rochester, N. Y.
Reed, F. E. & Co., Worcester, Mass.
Strelinger, O. A. & Co., Detroit, Mich.

Minerals

English Co., New York City
Simmons, E. E., " "
Ward's Nat. Sci. Co., Rochester, N. Y.
Howell, E. E., Washington, D. C.
Wilson, N. L., Boston, Mass.

Wood Specimens.

Hough, Romeyn B., Lowell, N. Y.
Maps (Relief and Wall), " "
Globes, etc., " "
Hammett Co., J. L., Boston
Central Sch. Supply House, Chicago.
Olmsted, W. A., " "

Rand, McNally, & Co., " "
U. S. School Furniture Co., " "
Western Pub. House, " "
Bell, W. L. & Co., Kansas City
Olcott, J. M., N. Y. City
Harison W. Bev., " "
Holbrook, W. H., Windsor Locks, Ct.
Cheney Globe Co., Mystic Bridge, " "
Schedler, H., New York
Howell, E. E., Washington, D. C.

Pens, Pencils, and Ink.

Am. Lead Pencil Co., New York
Faber, A. W., " "
Barnes & Co., A. S., " "
Eagle Pencil Co., " "
Faber, Eberhard, " "
Spencerian Pen Co., " "
Electric Pen Co., " "
Gillott, Jos. & Sons, " "
Esterbrook Pen Co., " "
Dixon Pencil Co., Jersey City, N. J.
Miller Bros. & Co., Meriden, Ct.
Diamond Ink Co., Milwaukee, Wis.
Western Ink Co., Winchester, Ind.
Higgins C. H. & Co., Brooklyn, N. Y.
Lippincott Co., J. B., Phila.

Pencil Sharpeners

Goodell & Co., Antrim, N. H.
Hammett Co., J. L., Boston
Central Sch. Supply House, " "
Chicago
Dick & Co., A. B., " "
U. S. School Furniture Co., " "
Walker Mfg Co., " "
Andrews Sch. Fur'g Co., N. Y. C.
Gould & Cook, Leominster, Mass.
Lippincott Co., J. B., Phila.

Photos for Schools.

Soule Photo Co., Boston
Dunton, C. H. & Co., " "
Wm. H. Pierce Co., " "
New York
Hegger, Frank, " "
Franz Hanfstaengl, " "
Berlin Photo Co., " "
Ad. Braun & Co., " "

Program Clocks.

Fred. Frick, Waynesboro, Pa.
Blodgett Bros, Boston, Mass.
Prentiss Clock Co., N. Y. City

School Records, Blanks, and Stationery.

Babb, Ed. E., Boston
Hammett Co., J. L., " "
Central Sch. Supply House, " "
U. S. School Furniture Co., " "
Lippincott Co., J. B., Phila.
Smith & White Mfg Co., " "
Holyoke, Mass.
Acme Sta. & Paper Co., N. Y. C.
American News Co., " "
Daniel Sloat & Co., " "
Olcott, J. M., " "
Blair Co., J. C., Huntington, Pa.

School Bells

Blake Bell Foundry, Boston
Hammett Co., J. L., " "
McShane Bell Found., Baltimore, Md.
Central Sch. Supply House, " "
Chicago.
U. S. School Furniture Co., " "
Buckeye Bell Foundry, Cin., O.
Cincinnati " "
Am. Bell Foundry, Northville, Mich.
Menely & Co., Troy, N. Y.
Menely & Co., West Troy, N. Y.
Rumsey & Co., Seneca Falls, N. Y.
Stuckstedt & Bros., St. Louis, Mo.

Second Hand School Books.

Babb, Ed. E., Boston
Geo. B. Doan, Chicago
Allen, D. A., " "
Barnes, C. M. Co., " "
Harison, W. Bev., N. Y. C.
Hinds & Noble, " "
Keyser, W. H. & Co., Philadelphia

Teachers' Agencies

Albany Teachers' Agency, Albany
Penn. Ed. Bureau, Allentown, Pa.
Bridge Teachers' Agency, Boston
Beacon " "
Co-operative " "
Eastern " "
Winship Teachers' Agency, Chicago
Albert & Clark Agency, " "
Co-operative Teachers' Agency, " "
Chicago
National Teachers' Agency, " "
The Thurston Teachers Agency, " "
Chicago
Interstate Teachers' Agency, " "
Colo. Teachers' Agency, Denver
National Ed. Bureau, " "
Harrisburg, Pa.

Texas School Agency, Marshall, Tex.
Coyriere, Mrs. N. Y. C.
Fisk Teachers' Agencies, Boston, New York, Chicago, Toronto, Los Angeles
Hazen, Irving, Met. Tea. Bu. N. Y. C.
N. Y. Educational Bureau, Schermerhorn Co., J. W. Young-Fulton, Mrs. M. J. Interstate Teachers' Agency, Saginaw, Mich.
Bardeen, C. W., Syracuse, N. Y.
Robertson, L. Memphis, Tenn.
Educational Ex. Providence, R. I.
Central Ed. Bureau, Phila., Pa.
Parker, C. J. Raleigh, N. C.
Southern Teachers' Exchange, Nashville, Tenn.

Typewriters.
Am. Writing Mach. Co., N. Y.
Wyckoff, Seamans & Benedict, Densmore Typewriter Co., Hammon Typewriter Co., Yost Typewriter Co., Typewriter Exchange, Smith Premier Co., Syracuse, N. Y. Daugherty Typewriting Co., Pittsburg, Pa.
Williams Type Co., N. Y. City
Ford Type Co.,

Heating & Ventilating
Am. Boiler Co., Boston
Boston Blower Co.,
Exeter Machine Works,
Gurney Heater Mfg. Co.,
Ideal Boiler Co.,

Magee Furnace Co.,
Smith & Anthony Co.,
Sturtevant Co., B. F.
Palsey, J. F.
Buffalo Forge Co., Buffalo, N. Y.
McLain Co., J. H. Canton, O.
Powers Regulator Co., Chicago
Fuller & Warren Warm. & Ven. Co. Chicago.
American Boiler Co.,
Boynton Furnace Co.,
Fuller & Warren Co.,
Gorton & Lidgerwood
Hart & Crouse,
J. L. Mott Iron Works,
Standard Radiator Co.,
Peck & Williamson Co. Cincinnati O.
Hersey Atwood Heater Co.,
Clifton, N. J.
Roberts Machine Co. Collegeville, Pa.
Craig Reynolds Foun. Co., Dayton, O.
U. S. Heater Co., Detroit, Mich.
Hyatt & Smith Mfg. Co.,
Detroit Heat. & Vent. Co.,
E. M. Link, Machine Co., Erie, Pa.
Stover Heater Co., Froport, Ill.
Herenden Mfg. Co., Geneva, N. Y.
Boston, New York, Phila., Pa.
Hartford Heater Co., Hartford, Ct.
Raymond Campbell Mfg. Co.,
Middletown, Pa.
Mowry W. C. Norwich, Conn.
H. Sandmyer & Co., Peoria, Ill.
L. A. Sheppard & Co., Philadelphia
Howard Furnace Co., Syracuse, N. Y.
Pease Furn. Co., J. F., Syracuse, N. Y.
Ranton Boiler Co., Syracuse, N. Y.
Carton Furnace Co., Utica, N. Y.
Giblin & Co.,
Kernan Furnace Co.,
Russell Wheeler & Co.,
Broomell, Schmidt & Co., York, P.

Architects.

We publish below a directory of architects who have had experience in designing and planning school buildings. Boards of Education usually employ a competent architect even for the smallest building, and the result is a dignified, well planned, economical structure, a credit to the city or town. We shall be glad to answer correspondence as to the names below, but we suggest that the architects be addressed directly, mentioning THE SCHOOL JOURNAL.

Eyre, Wilson
927 Chestnut St., PHILADELPHIA, PA.
Architect of the Educational Building, 61 E. 9th street, N. Y.

Schweinfurth, Albert C.
SAN FRANCISCO, CAL.

Schweinfurth, C. F.
CLEVELAND, O.
Architect of Ursuline Convent, Cleveland. St.

Joseph Seminary, Nottingham, O. Physical laboratory, Adelbert College, Cleveland.

Schweinfurth, J. A.
Exchange Building, BOSTON, MASS.
Architect of James St. and Seymour St. Schools, Auburn, N. Y., etc.

Gardner, Byrne & Gardner
Mr. Gardner is the author of Gardner's "School Buildings." SPRINGFIELD, MASS.

Hilton, Howard
75 Westminster St., PROVIDENCE, R. I.

Beman, S. S.
Architect of Laboratories and Medical School, Northwestern University.

Brocklesby, Wm. C.
HARTFORD, CT.
Architect Dormitory for Smith College, Northampton, Mass., and New Britain High School, Ct.

Bullard, Geo. Wesley
TACOMA, WASH.
Architect of Puget Sound University, Young Men's Hall, etc.

Wheelwright & Haven
Architects of many Boston Schools, also High School Building, Marlboro, Mass. BOSTON, MASS.

Potter, William A.
Architect of the Teachers College, N. Y. City. Commencement Hall, Princeton College, N. J. NEW YORK CITY

McKim, Mead and White.
Architects of Columbia College Buildings, New York, University Buildings, New York, Brooklyn Institute, Latin School, Baltimore, Md., etc. NEW YORK CITY.

Marshall, Henry Rutgers.
Architect of Brearley School, 9 W. 54th Street, N. Y. City, Bryn Mawr School, Baltimore Md. NEW YORK CITY.

Lamb and Rich.
Architects of Alumni Hall, Dartmouth College, Hanover, N. H., Berkeley School, 9 W. 44th St., New York, Pratt Institute, Brooklyn, N. Y. NEW YORK CITY.

Copes and Stewardson.
Architect of Pembroke Hall, Bryn Mawr College, Dormitory Buildings for University of Pennsylvania, etc. PHILADELPHIA, PA.

New Text-Books for the Month.

This list is limited to the books that have been published during the preceding month. The publishers of these books will send descriptive circulars free on request, or any book prepaid at prices named. Special attention is given to all such requests which mention THE SCHOOL JOURNAL. For Pedagogical Books, Teachers' Aids, School Library, and other publications, see other numbers of THE JOURNAL.

AUTHOR.	TITLE.	PP.	BINDING.	PRICE.	PUBLISHER.
Anthony, W. A. & Brackett, Cyrus F. Barfield, F. C.	Elementary Text-Book of Physics.	512	Cloth	4.00	J. Wiley & Sons.
Bertenshaw, T. H.	Model Drawing and Shading from Casts.	92	"	1.00	Chas. Scribner's Sons, Importers
Bigot, Mme. C.	Rhythm Analysis and Musical Form. With Exercise (Longmans' Music Course. Pt. 3.)	701	"	.75	Longmans, Green & Co.
Boughton, Willis	La Tache de Petit Pierre.	140	B'ds	.35	American Book Co.
Braunholtz, E. G. W. (Ed.)	History of Ancient Peoples.	541	Cloth	2.00	G. P. Putnam's Sons.
Cutler, Edward H. (Ed.)	Holiers' L'Avare.	245	"	.70	The Macmillan Co.
Collins, J. Churton	The Ninth Book of Virgil's Aeneid.	178	"	.50	Ginn & Co.
Daniell, Moses Grant	Pope's Essay on Criticism.	56	"	.50	The Macmillan Co.
D'Ooge, B. L.	New Latin Composition.	214	"	1.00	Leach, Shewell & Sanborn.
Fraser, R. W.	Easy Latin for Sight Reading.	146	"	.50	Ginn & Co.
Fillmore, J. H. & Unseld, B. C.	(The Story of the Nations.)—British India.	399	"	1.50	G. P. Putnam's Sons.
Fillmore, J. H. & Unseld, B. C.	Fillmore's School Singer.	158	B'ds	.30	Fillmore Brothers.
Harrington, Karl Pomeroy, & Tolman, Herbert Cushing	Greek and Roman Mythology.	179	Cloth	1.00	Leach, Shewell & Sanborn.
Lowell, James Russell	The Vision of Sir Launfal.	114	"	.25	Leach, Shewell & Sanborn.
Macy, Jesse	The English Constitution.	534	"	2.00	The Macmillan Co.
Martin, A. T. (Ed.)	Sir Thomas Malory's Le Morte D'Arthur.	254	"	.50	" " "
Merck, C. (Ed.)	Lessing's Minna Von Barnhelm.	224	"	.75	" " "
Matzke, J. E.	A Primer of French Pronunciation.	73	Paper	.25	H. Holt & Co.
Matthews, C. P. & Shearer, J.	Problems and Questions in Physics.	274	Cloth	1.80	The Macmillan Co.
Montgomery, J. L.	Modern Bookkeeping.	240	"	.80	Maynard, Merrill & Co.
Noyes, G. R. (Ed.)	Carlyle's Essay on Burns.	15	Paper	.25	Houghton, Mifflin & Co.
Phillips, Joseph	Wood Carving.	92	Cloth	1.00	Chas. Scribner's Sons, Importers.
Russell, Israel C.	Glaciers of North America.	210	"	.35	Ginn & Co.
Shakespeare, Wm.	As You Like It.	234	"	.50	Leach, Shewell & Sanborn.
Sullivan, Christine G.	High School Class Book of Drawing.	121	B'ds	.50	American Book Co.
Swannell, M.	Normal	84	"	.50	" " "
Tarr, Ralph S.	Blackboard Drawing.	78	"	1.10	The Macmillan Co.
Trent, W. P. (Ed.)	Elementary Geology.	449	Cloth	1.40	" " "
" " "	Macaulay's Essay on Milton.	87	Paper	.25	Houghton, Mifflin & Co.
" " "	Macaulay's Essays on Johnson and Goldsmith.	92	Cloth	.25	" " "
" " "	Macaulay's Life and Times of Addison.	218	Paper	.15	" " "
Verity, A. W. (Ed.)	Milton's Paradise Lost, Books 9 & 10.	166	Cloth	.50	The Macmillan Co.
Wise, T. J. (Ed.)	Browning's Belis and Pomegranates	326	"	.75	Ward, Lock & Co.
Wells, B. W. (Ed.)	Tosser & Heiden's Koepfickerstrasse, 120.	159	Paper	.30	D. C. Heath & Co.
Webb, W. T. (Ed.)	Cowper's Task, Book 4.	80	"	.30	The Macmillan Co.
Woolcombe, W.	Practical Work in Physics, Pt. 3.	94	Cloth	.90	" " "

Aids for the Study of Nature.

For nature lovers Bradlee Whidden has had prepared some most attractive little books. It is time now just before nature's spring awakening to see what helps may be had in the way of books. Perhaps most of our readers have seen his charming little books treating of Turtles, Snakes, etc., Trees and Shrubs,

Night Moths, Day Butterflies, etc. They are lavishly and accurately illustrated, so that the objects may be identified without any difficulty. A new and useful book is entitled Every Bird. It is a guide to the identification of the birds of woodland, beach, and ocean. Every bird is plainly and correctly described, and very carefully illustrated. Another valuable book is Wild Flowers of America, containing fifty-one large colored plates.

**FOR SCHOOLS
AND COLLEGES.**

The following list of school and college text-books most largely in use in the United States, has been prepared for the convenience of superintendents, principals, and school officials. From time to time special lists of books will be taken up in THE JOURNAL and reviewed as has been done with Vertical Writing and School Music Systems. **ABBREVIATIONS.**—When a firm has several branches always address the nearest branch. Mention THE SCHOOL JOURNAL when writing.

A. & B., Allyn & Bacon, Boston.
A. B. C., American Book Co., New York, Cincinnati,
Chicago, Boston, Phila., Atlanta, Portland, Ore.
A. & Son, Armstrong & Son, New York.
A. B. & Co., Barnes & Co., New York.
Appleton, D. Appleton & Co., New York & Chicago.
C. M. B. Co., C. M. Barnes Co., Chicago.
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Dana's Geology, " " LeConte's, " " Gifford's Ele. Phys., T. B. & Co. Winchell's (3), Griggs Houston's Physics, (3) E. & Bro. Dodge's Ele. Biology, Harper Carnhart & Chute's Phys., Allyn & Bacon Nature's By-ways, Morse Co.
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Book Notes.

LANGUAGE AND LITERATURE.

The School Classics are a series of small volumes edited under the supervision of the well-known classical scholars, William C. Collar and John Tetlow. The "Ninth Book of Vergil's Aeneid" has been edited by Edward H. Cutler, A. M., principal of the preparatory school at Newton, Mass. In this is combined rare scholarship and thorough appreciation of the needs of the schools. The story of books I.—VIII., given in condensed form, will fit the pupil to understand the Latin narrative in book IX. In the notes illustrations are given wherever they will aid to an understanding of the text. The maps, word-group, and vocabulary help to make this a very desirable edition of this classic. (Ginn & Co., Boston.)

Among text-books in German "Goethe's Dichtung und Wahrheit" deserves a place as a work of literary excellence; there are few autobiographies that can rank with it. This volume is designed for students who have obtained a sufficient knowledge of the language to enable them to take up an investigation of its literature. It is a blending of narrative, anecdote, literary history, and criticism, and cannot but prove exceedingly interesting. The work of the editor has been exceedingly well done (Henry Holt & Co.).

For the Students' Series of Latin Classics, Steuding's "Griechische und Römische Mythologie" has been adapted to the needs of American students, by Prof. Karl Pomeroy

Harrington, of the University of North Carolina, and Prof. Herbert Cushing Tolman, of Vanderbilt university. The editors have aimed that the genesis and development of the myth should be clearly set forth, and that the text should be supplied with a generous supply of references to some of the most useful literary passages illustrative of the subject in hand. It is a useful little book for classical students. (Leach, Shewell & Sanborn. \$1.00.)

A revision of Moses Grant Daniel's "Exercises in Latin Prose Composition," based mainly upon Caesar and Cicero, has been issued under the title of "New Latin Composition." Its purpose is to furnish pupils with sufficient material for oral and written practice in Latin composition while reading the authors named. The former work was found by teachers to suit this need; the changes and additions will render the work still more effective. (Leach, Shewell & Sanborn. \$1.00.)

A revised and enlarged edition of "American and British Authors," by Frank V. Irish, has just been issued. This is intended as a text-book for high schools, academies, colleges, etc., or for private reading. Only a slight examination of the subject is needed to show that the author is a deep student of the subject; in addition, he is master of an attractive style, has exercised a wise choice of material, and has presented it in the form required by the schools. He has given readable sketches of the leading authors, lists of their works, criticisms, references, and short selections from their writings. Less space is devoted to British authors, but sufficient to show the reader the wealth of literature we inherit from the mother country. The authors of less note and their works (American and British), are placed together in brief paragraphs in smaller type.

The book has some excellent special features, such as helpful thoughts, authors' birthdays, a list of poets-laureate of England, literary recreations, etc. The book is printed on superior paper, in clear type, and good taste has been displayed in the work. There are many good portraits and other illustrations. (Published by Frank V. Irish, Columbus, Ohio. \$1.35.)

The "Sir Roger De Coverley Papers" will never go out of date. They were written about 1714 for the "Spectator," and every generation admires them. All attempts to bring these writings before the coming generation are to be strongly commended. They have been prepared for school use by D. O. S. Lovell, master of the Roxbury Latin school, with a valuable introduction and suitable notes. Most of these papers were written by Addison, most of the rest by Steele. (Longmans, Green & Co.)

Lives of great men should somehow be got into the hands of the boys and girls of the grammar schools, and we know of no way better than that attempted in the series of English Classics of which "Southey's Life of Nelson" is one. This has been edited by Edwin L. Miller, instructor in the Englewood (Ill.) high school. We should urge the selection of such books as those for school libraries, and we hope the publishers will add to the series other books of a similar kind. (Longmans, Green & Co.)

It is a good sign when the children in the school are led by their teacher's enthusiasm and literary taste to select books like the "Sketch Book" of which the incomparable Irving was the author. Certainly such a consummation seems near at hand, for ten selections have been gathered into a volume of the Select American Classic Series. To these have been added, some of Webster's Orations and Emerson's "The American Scholar" and "Self Reliance." Altogether it is a capital volume for the purposes proposed. (American Book Company. 60 cents.)

A very valuable series of English classics was begun several years ago that attracted our attention at once, for the issuing of such volumes had not become general then as it has since. No. 174 in this series is now on the editorial table entitled "Tales of a Traveler," by Washington Irving. We not only welcome the contribution, but the excellent selections made. The notes and biographical sketch will give value to this book in schools. (Maynard, Merrill & Co. 24 cents.)

NATURAL SCIENCE AND MATHEMATICS.

Ralph S. Tarr, a professor in Cornell university, has written an "Elementary Geology," intended for the use of high school pupils, and others in about that stage of school work. In this he has somewhat curtailed the stratigraphic side of the subject, because this is the feature that beginners are least able to understand. On the other hand, he has treated dynamic geology very fully, because the pupil sees illustrations of it all around him, and he has considerable knowledge of the facts before he takes up the study of books. Such topics as weathering, wind erosion, underground water, river erosion, river and lake deposits, glaciers, agents at work in the ocean, deposition in the sea, stratification, changes in the level of the land, volcanoes, earthquakes, and geysers, etc., fit in very nicely with the physical geography study. Indeed, this volume is supplementary to the author's Elementary Physical Geography. It is profusely illustrated with half-tone maps, etc. Many of the specimens, whose pictures are given are in the large geological collection of Cornell university. (Macmillan Co., New York, \$1.40.)

A reading lesson in geography and geology is what Prof. Israel C. Russell calls his "Glaciers of North America," and, indeed, it is a very instructive volume for advanced students in those subjects. Until recently all current knowledge of glaciers was based on the study of those of the Alps, but in recent years it has been found that these ice formations exist in other parts of the world, notably North America. On this continent there are types, or "genera," that have never been studied before. The general characteristics of glaciers are considered, and there are described the glaciers of the Sierra Nevada, California, Canada, Alaska, Greenland etc. The book has many half-tone and other illustrations. In addition to the interest among students, it will attract much popular interest. (Ginn & Co., Boston.)

The study of minerals can be carried on with rapidity and satisfaction to the student by means of the "Tables for the Determination of Minerals by Physical Properties" based on the system of Dr. Albin Weisbach, by Persifer Frazer, a widely recognized authority on the science. In this the minerals have been divided into three tabular systems, of which the first embraces those of metallic luster; the second those of non-metallic luster which gives a colored powder, and the third all minerals of non-metallic luster and colorless streak. These three systems of tables fall again into single tables in which the minerals arranged according to their hardness—the softest being placed first and the hardest last. In this the fourth edition one hundred and thirty-five additional species have been added. (J. B. Lippincott Co., Philadelphia. \$1.50.)

Educational Notes.

Dr. Joseph S. Ames, of Johns Hopkins university, says, in the preface of his "Theory of Physics," recently brought out that his aim in writing this book is to give a concise statement of the experimental facts on which science of physics is based, and to present with these statements the accepted theories which correlate or "explain" them. Their "explanation," in terms of more fundamental ideas and principles, at Dr. Ames's hand, makes a book of some 550 octavo pages. It is evident, at a glance, that the plan for this work was very carefully made, as the divisions of the book are splendidly balanced.

Prof. Rowland Watts, of the Western Maryland college, says: "I think the book is like Dr. Ames, clear, concise, and modern."

Harper & Brothers, of New York, publish this book at \$1.60.

To almost all young people Shakespeare seems never to have been a boy, and naturally, too, when one realizes how little has been written covering the early days of the youth of Warwick. Whatever is known of his boyhood has now been gathered, by Dr. W. J. Rolfe, into an attractive volume entitled, "Shakespeare the Boy" (\$1.25), recently published by the Harpers. It is an excellent stepping-stone to the study of Shakespeare, and is sure to interest boys and girls, as well as other people.

One of the most important of modern text-books, undoubtedly, is Phillips & Fisher's "Elements of Geometry" (published by Messrs. Harper & Brothers, at \$1.75), a work which contains so many new features that we have not space to enumerate them here. Sufficient evidence of the value of this book is given, we think, in the following letter, recently received by the publishers, from Mr. George W. Evans, of the department of mathematics, English high school, Boston:

"I am glad to say that it is the best text-book of geometry I have ever seen. What pleased me most was, first, the thorough scholarship shown in its pages; secondly, the abundant historical comment; thirdly, the typography and drawings; and, finally, the practical adaptation of the original exercises. The use of photographic pictures of actual models in studying solid geometry is an obvious improvement that was bound to come, and I am glad that its introduction was in such competent hands. In my opinion, no better favor could be done the cause of geometry teaching in Boston than the adoption of this as a regular school text-book by the Boston school board.

To meet the demands from schools in which only limited time can be given to the subject, an "abridged edition" is being prepared. The first five books of the complete work have just been published, under the title, "Plane Geometry." (80 cents.)

Evidently President Harper, of the Chicago university, is heartily in favor of the method of teaching English, which has been developed so successfully in Harvard university under the leadership of Professor A. S. Hill, as will be seen in the following quotation from the president's letter concerning Professor Hill's elementary text-book:

"Hill's 'Foundations of Rhetoric' is believed by the professors of English in the Chicago university to be the most perfect book on the subject that has yet been published. They are using the book in all the schools connected with the university, and we believe that its use in the public schools of Chicago would make it unnecessary for the students of the schools, who come to the university, to pursue one of the courses now offered in the university. This course is offered because of the unsatisfactory training which the pupils of the high schools now receive with the use of the present text-book."

This book is now used in nearly all the leading preparatory schools in the country and in the high schools of many of the large cities; for example, Chicago, Minneapolis, Duluth, Boston, Philadelphia, Brooklyn, and others.

A new edition of a work which has become almost a classic, Smith's "Smaller History of Greece," was just been published by the Harpers. This excellent little manual has been rewritten and revised fully by Carleton L. Brownson, instructor in Greek in Yale university. The new book is set in larger type than the old edition, and contains many new illustrations. It is covered with an attractive dark red binding. The price of the book is \$1.00.

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HISTORY AND POLITICAL SCIENCE.

Students of history, especially in the colleges, will be particularly interested in the publication of a volume on "The English Constitution," by Jesse Macy, M. A., professor of political science in Iowa college. This ought to be a most interesting subject to all Americans, because our own political institutions are so largely based on those of England. While most of them know this, in a general way, they do not fully appreciate it until they read some work of this kind. Prof. Macy's arrangement and treatment of the topics are admirable, and the book is an excellent one for those who wish a good general knowledge of the subject. In part I. he considers the nature of the constitution as follows:—A comparative view of the English and American constitutions, the house of commons and the cabinet, checks and balances, the house of lords, the crown, the ministry, the courts, the church, and sources of the constitution. The growth of the constitution is traced in part II., viz., sources of power and influence of the Norman period, royal rule by means of the council, Magna Charta, the nobility, Henry VIII., the crown, and the house of commons, religious controversy, the great revolution, the great reform, etc. The appendix contains the great English state papers. (The Macmillan Co., New York. \$2.00.)

Those who are searching for aids in teaching the history of our country should not overlook the "Reference Manual and Outlines in United States History," by Eli G. Foster, a copy of which we have just received. In this our history is covered from the discovery by Columbus up to President Cleveland's administration. The book gives the substance of important events and great legislative acts; a series of chains, showing the development of institutional, industrial, and social life; the outline of the wars by campaigns, illustrated by maps; a novel arrangement of the causes of national conflicts; references to histories, serving as a guide to more extended course of historical reading. Some of the topics treated are movements toward confederation, the acquisition of territory, tariff legislation, important treaties, paper money, states' rights, financial panics. Since the topical method of teaching history has come into practice, such books as this have been in demand. For classes that are somewhat advanced, that seems to be the method that leads to the best results. In this book the more important events are put in large type, and those of less importance, in small type; this is

an excellent feature. The giving of maps of the campaigns, etc., is a good idea. The double-page map of the acquisition of territory is especially good. We think it would have been better to make some of the others double page, as the print on them is too fine. (M. L. Zercher & Co., Topeka, Kan.)

MISCELLANEOUS.

J. L. Montgomery, instructor in bookkeeping in the Columbia grammar school, New York, has written a book on "Modern Bookkeeping, Single and Double Entry." In this he has endeavored to divest the subject of the elaborate and useless theories by which it is often encumbered. He has kept in view three things: First, the relative importance of the topics; second, the pupil with his lack of experimental knowledge; and third, the limited portion of time the teacher has to devote to the subject. He has aimed to give prominence to essential forms, actual business customs, and the fundamental principles of debit and credit which underlie the diverse methods of keeping accounts at the present time. Beginning at a single entry he gradually develops the subjects, avoiding these complications that confuse the student. Numerous exercises and reviews aid greatly in fixing the lessons in the mind. (Maynard, Merrill & Co., New York. Crown, 8vo., cloth, 240 pp. Introduction price, 80 cents.)

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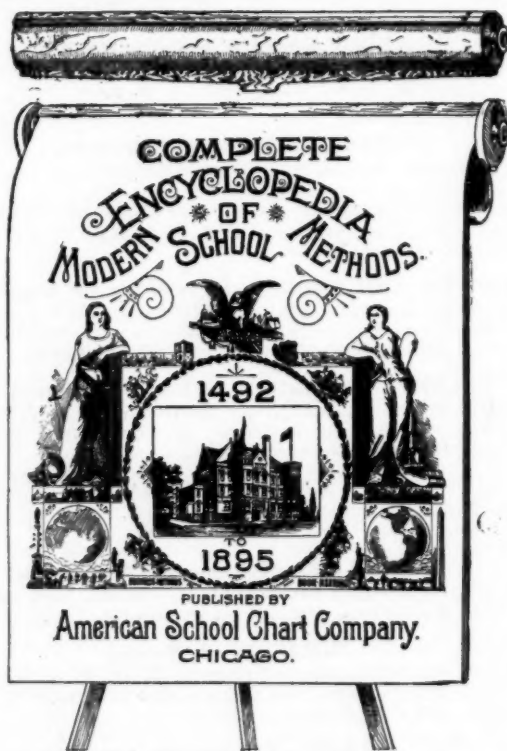
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School Building Notes.

ALABAMA.

Owenton.—College buildings will be built by the North Alabama M. E. Conference; cost, \$30,000.

Wetumpka will build school-house. Write W. P. Gladdis, mayor.

ALASKA.

Hoonah will build school-house. Write D. R. Francis, secty., Dept. of the Interior, Washington, D. C.

CALIFORNIA.

Gilroy will vote on the issuing of \$50,000 bonds for a new school-house.

Longbeach will erect Chautauqua summer school building. Write R. J. Craig, arch.

Nevada City will build school-house; cost, \$10,000.

Salinas is considering the question of erecting a new school-house. Write A. C. Barker.

San Jose will build high school. Write F. P. Russell, secretary of school board. Saratoga will build school-house to cost about \$6,000.

CANADA.

Chisley will build school-house; cost, \$15,000. Write H. J. Powell, architect, Stratford.

Ottawa.—Tenders will be received by M. C. Edey, architect, Sparks street, for erecting a stone school-house at Merivale.

Tweed will erect school-house. Write Arch. Thos. Hanley, Belleville, or Emerson & Campbell, Tweed.

Zurich will build school-house in Hay township. Write Benj. Surerus, secretary.

Winnipeg, Man., will build school-house on the Machray grounds. Write Joseph Carman, school board.

COLORADO.

Colorado Springs will build school-house; cost, about \$50,000.

CONNECTICUT.

Derby will build school-house; cost, \$40,000. Write Warren R. Briggs, architect. Bridgeport.

Fairhaven will build school-house on Lombard street; cost, \$30,000. Write Arch. L. W. Robinson, New Haven.

Hartford will build addition to high school. Write George Keller, architect. Will build school-house; cost, \$30,000. Write W. C. Brocklesby, architect.

New Britain will build school-house; cost, \$60,000. Write Municipal Building Committee.

DISTRICT OF COLUMBIA.

Washington will erect two new school buildings. Write commissioners. Plans have been completed for the Washington high school; cost, \$70,000. Write building inspector.—Will build Hall of Languages for the American university.

GEORGIA.

Atlanta will erect a school-house for colored children; cost, \$15,000.

Athens.—The trustees of the university contemplate erecting new buildings.

Brunswick will build school-house in Glynn county; cost, \$60,000.

Moultrie will build school-house; cost, \$5,000. Write school board.

ILLINOIS.

Anna will build school-house; cost, \$5,000. Write Jas. M. Shipley, secretary board of education.

Charleston.—It is reported that the trustees of the Eastern Illinois normal school have relieved the present contractors of the work and will make new contracts for completing the building. Write Geo. H. Miller, architect.

Chicago will make alterations to the Von Humboldt school building, corner North Rockwell avenue and Hirsch street. Write Normand S. Patton, archi-

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tect, 1117 Schiller building.—The pupils of the South Division high school will petition the school board for a new building.—The board of education has about \$1,150,000 to spend on new schools this year.

Davis will erect a new school-house. Write school board.

Freeport will build school-house. Write Dr. J. F. Fair, board of education.—Will build school-house; cost, \$18,000. Write Archs. Reeves & Baillie, Peoria.

Mount Sterling will build school-house; cost, \$16,000. Write Archs. Reeves & Baillie, Peoria.

Roodhouse will build school-house. Write N. A. Buckingham, architect, Jacksonville.

INDIANA.

Hartford City.—A new school building recently completed at a cost of \$25,000, was burned. Insurance, \$12,000.

Liberty.—The Pleasant Hill school-house was destroyed by fire.

Newport will build school-house. Write Archs. Krutsch & Laycock, 25 West Washington street, Indianapolis.

Plymouth will build school-house; Write J. F. Wing, architect, Fort Wayne.

Vincennes will build high school building; cost, \$25,000. Write Arch. F. S. Allen, Joliet, Ill.

Wabash will build school-house; cost, \$15,000. Address Dr. J. N. Ford, secretary board of school trustees.

IOWA.

Burlington.—The West Hill school burned; will build another school-house, to cost \$20,000.

Clarion will hold an election, to vote on the issuing of bonds for the erection of a new school-house and an addition to the present building. Write I. A. Nagle, secretary.

Davenport will erect a new school-house; cost, \$25,000. Write Clausen & Burrows, architects.

Dubuque will erect theological seminary. Write Buechner & Jacobson, St. Paul, Minn.

East Waterloo will build high school; cost, \$30,000. Write Orff & Joralemon, architects, Minneapolis, Minn.

Forest City will erect school-house; cost, about \$8,000. Write Chas. S. Chase, secretary.

Fort Dodge will erect a new high school building. Write F. S. Allen, architect, Joliet, Ill.

Grundy Center will build school-house. Write F. S. Allen, architect, Joliet, Ill.

Newton will vote on the issuing of bonds for a new school-house.

Paton will build school-house in Independent district of Hardin, No. 5. Address W. E. Stewart, secretary board of directors.

Waterloo will build school-house. Write Archs. Hallowell Brothers.

KANSAS.

Eureka will build school-house. Write W. J. Wiggins, clerk.

Pittsburg will build a new normal school; cost, \$40,000. Write Legislature.

KENTUCKY.

Jackson.—Plans are ready for the new building of the Jackson Collegiate Institute.

LOUISIANA.

Ruston will build summer normal school. Write school council.

MARYLAND.

Baltimore will erect a new building for No. 7 grammar school; cost, \$40,000. Write board of education.—Will put heating apparatus in No. 9, colored school; cost, \$6,190. Write H. C. Gregory, contractor.

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Cambridge will erect a Latin school building. Write Wm. H. Gray, superintendent of public buildings.

Everett will build school-house on Chelsea street. Write G. Wilton Lewis, Architect, Boston.

Haverhill will build school-house; cost, \$40,000. Write board of education.

Holyoke.—The school board has asked for an additional appropriation of \$30,000 to complete the high school.

Lowell.—The state has made an extra appropriation of \$15,000 for the new normal school.

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Salem will erect a new high school building. Write city council.

South Hadley will erect new dormitories for Mt. Holyoke college. Thorpe Bros., of Holyoke, contractors for one; another will be built by A. C. Valadier, of New York city.

Springfield will build high school; cost, \$239,000. Write Archs. Hartwell, Richardson & Driver, Boston.

Upton will build school-house; cost, \$15,422. Write board of education.

Westfield will build a parochial school corner of Mechanic and Bartlett streets; cost, \$20,000.

Worcester will erect a science building for the Worcester academy; cost, \$50,000. Write Archs. Barker & Nourse.

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Detroit will have fire escapes on all the public school buildings; estimated cost, \$20,000. Address Lewis H. Chamberlin, secretary board of education, 50 Miami avenue.

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Sun will build school-house in Grant township. Write C. C. Funt,

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Duluth will build school-house on St. Croix avenue. Write E. R. Cobb, clerk.—Will build normal school; cost, \$70,000.

Little Falls.—The high school burned, with a loss of \$20,000; will be rebuilt as soon as possible.

Minneapolis will erect a medical college; cost, \$50,000. Write Mac Leod & Lomeroux, architects, Lumber Exchange.

Stanchfield will build school-house. Write S. E. Erickson.

St. Paul will erect school-house. Write Arch. C. H. Johnson, 713 Manhattan building.—Will erect girls' dormitory at the Agricultural college; cost, \$25,000.—Will erect a new school-house in ward 2; cost, \$15,000, and another in ward 10 to cost \$10,000. Write city council.—Will build addition to Ericsson

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